

Railway Age

Founded in 1856

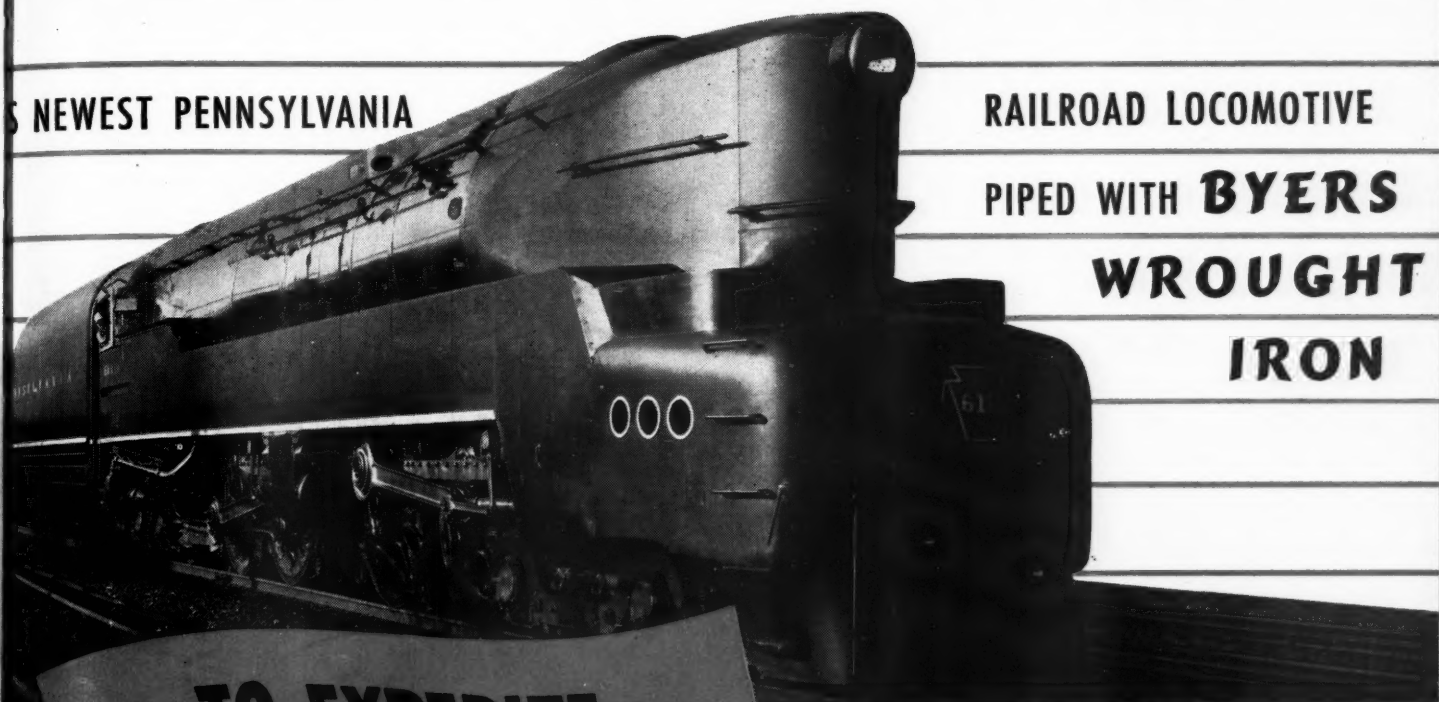
NEWEST PENNSYLVANIA

RAILROAD LOCOMOTIVE

PIPED WITH **BYERS**

WROUGHT

IRON



TO EXPEDITE

TRANSPORTATION

This newest Pennsylvania locomotive was designed for long runs, eliminating changes at intermediate points. It typifies a trend that railroads have followed for years toward motive power units that will operate at higher speeds and be in active service more of the time.

Design accounts for the higher speeds and capacities . . . but material selection has a lot to do with the greater utilization. To raise the 40,000 miles once common between general repair periods to today's 150,000 and 200,000 miles, demands something extra in durability and dependability.

Piping on the Pennsylvania locomotive is Byers Wrought Iron. Byers Staybolt Iron was used for the flexible staybolts.

Railroad men are using wrought iron in many rolling stock applications; one road, in fact, has specified that wrought iron be used exclusively for all piping. Wrought iron has been successfully used for lubricator lines, where its freedom from scale troubles recommends it highly; for tender slope plates; and for equalizer bars. For many years it has of course been standard material for cross-over lines, as its fabricating qualities made it take the necessarily severe bending

without any adverse effect on strength or durability. Wherever vibration that causes fatigue failure in ordinary materials, or severe corrosion, are present, wrought iron is the first remedy that comes to the minds of experienced users.

If you are purchasing new equipment or repairing old, you will find it pays to check on the service possibilities of wrought iron. Our Engineering Service Department will be glad to give you information on its performance, direct from the practical experience of active railroad men. Do not hesitate to write.

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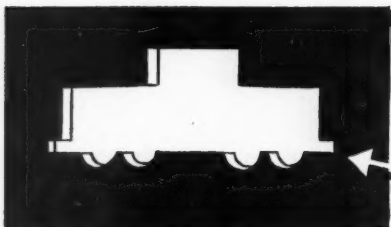
BYERS

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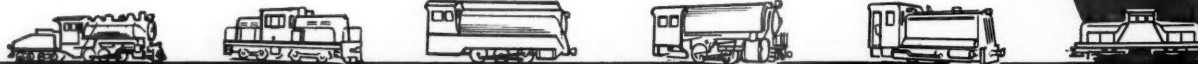
A PORTER DIESEL is always on the job! With a Porter Diesel-Electric there's no such thing as Monday morning idleness — no time wasted firing up or waiting for steam pressure. A Porter Diesel is instantly ready at the touch of a button. With two power plants in the same unit, the locomotive is still available for light duty even if one is inoperative. A Porter Diesel has greater pulling power and better tracking features. And that isn't all! Because worn parts are easily and quickly replaceable, a Porter Diesel requires no long periods of idleness for major



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An article discussing how this type of motive power was used to great advantage in the operation of the Atlanta & St. Andrews Bay.

Interlocking with Novel Features on Peoria & Pekin Union 856

A new scheme of aspects used in all-relay electric interlocking, which has 13 levers as compared with 76 in previous mechanical plant, is described in this article.

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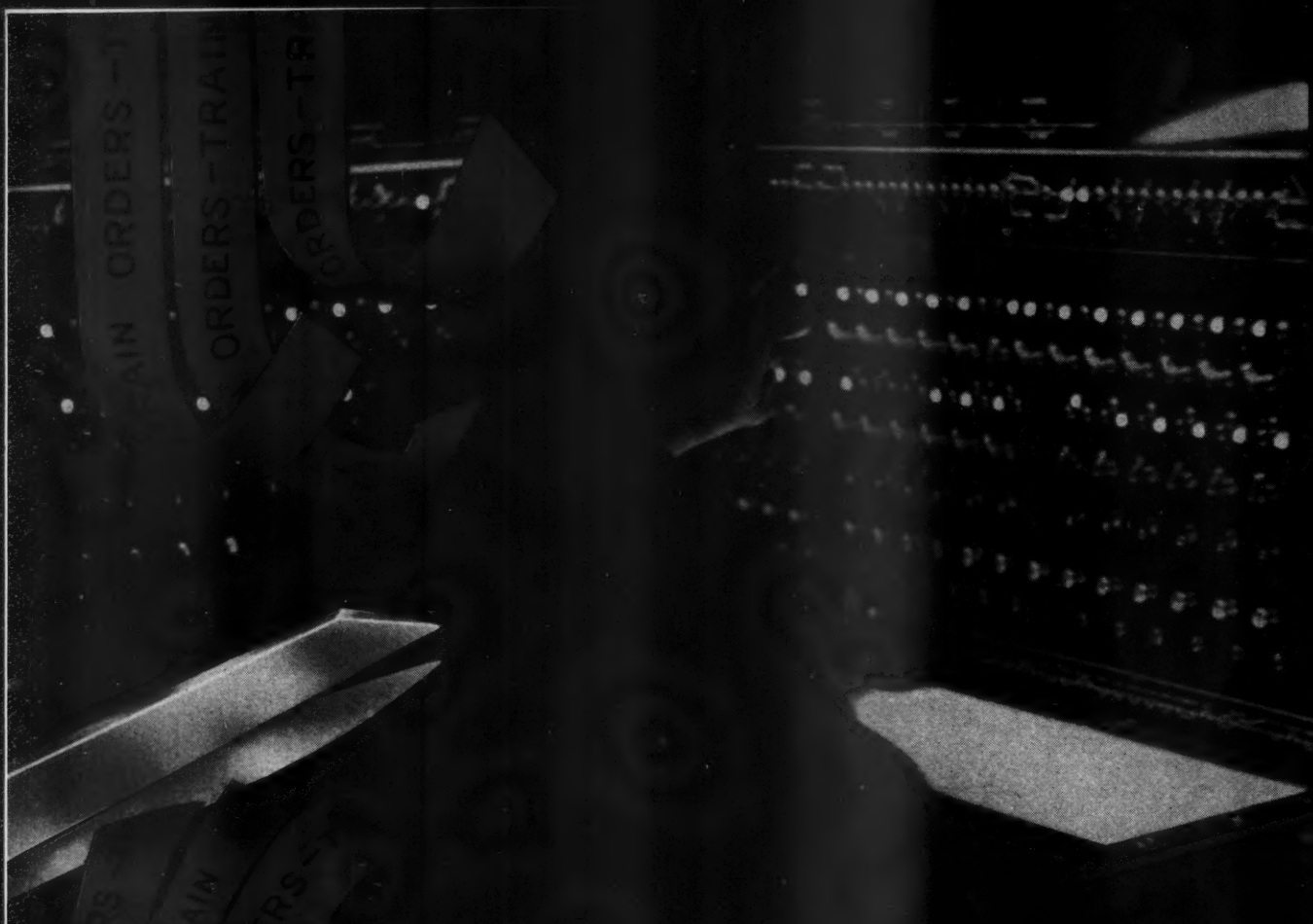
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C. T. C. cuts the *RED TAPE* of Train Dispatching

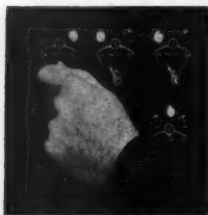
UNDER present conditions of tremendously increased traffic, many dispatchers directing trains under older systems of train operation are severely handicapped in their efforts to "keep them rolling."

In contrast, C.T.C. provides a speedy and simple method for the dispatcher to authorize train movements by signal indications. This eliminates the red tape of issuing, transmitting and delivering written train orders, and permits the dispatcher to confine

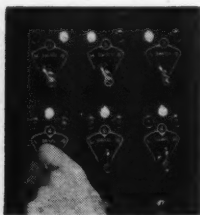
his attentions to the actual planning of train movements. Information as to the location of all trains in his territory is available without delays in transmission and the dispatcher has only to operate the control levers to make his instructions instantly effective in the field.

On some of the major C.T.C. installations, locomotives have been relieved for duty on other divisions through the reduction of road time of trains operating under this modern method of train operation.

HOW TRAIN MOVEMENTS ARE AUTHORIZED AND "OS"ed WITH "UNION" C. T. C.



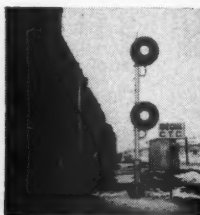
Restores switch lever to normal



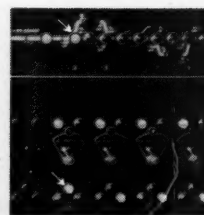
Clears signal lever



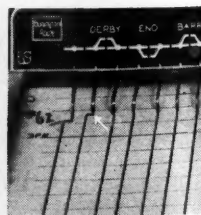
Switch operates and signal clears



Train enters "OS" track section



"OS"es on track model



"OS" records on train graph

UNION SWITCH & SIGNAL COMPANY

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RAILWAY AGE

Unequal Incomes, Employment and Production

The avowed postwar objectives of both New Deal and business postwar planners are the same—full employment and correspondingly large production of goods and services. But the true *ultimate* objective of most New Deal planners is widely different. It is *equalization of incomes* by great reduction of large incomes and the large increase in less-than-average incomes which they assume would result. The President's insistence on limitation of all incomes to \$25,000 after taxes, which was originally proposed by the C. I. O., is sufficient proof. Without any supporters of government planning saying so, excepting avowed socialists and communists, they show they believe in the socialist-communist principle, "From each according to his ability; to each according to his needs."

That this real ultimate, but usually unavowed, objective of New Deal planning should be as widely known and understood as possible is vitally important. Otherwise the true purpose and probable effects of means proposed for attaining its avowed objectives cannot be understood and appraised.

Advocates of private enterprise can consistently condemn large incomes derived from inherited property, or from dishonest or monopoly practices. But consistency, principle and common sense require them to oppose efforts for wholesale equalization of incomes, because private enterprise is a *voluntary incentive system*, the driving force of which is *unequal rewards for unequal ability, sacrifice and effort*. Impair the opportunity for securing unequal rewards, and you reduce the driving force of private enterprise. Abolish that opportunity, and private enterprise becomes a worthless machine without any motive power.

Many persons support programs for "equalization" of incomes while really being strongly opposed to it, and in favor only of increasing their own incomes and reducing incomes larger than their own. No railway locomotive engineer would favor reduction of his pay to help increase the pay of lower paid employees. Why not? The locomotive engineer would reply that his work is *worth more* than that of a track laborer, for example. But why worth more? Because, as he claims, it requires more experience and ability, involves more responsibility and is more "productive." But, obviously, that is an argument for unequal incomes for unequal experience, ability, responsibility and productiveness for everybody, and, therefore, an argument for much larger incomes for division officers than for locomotive engineers, and for still much larger incomes for higher officers.

And yet the difference between the average hourly pay of the highest-paid and the lowest-paid railway employees is relatively greater than the difference between the average hourly pay of railway officers and that of the highest-paid railway employees. In January the average pay per hour of passenger engineers for time actually worked—\$1.56—was exactly three times as great as the average of 52 cents received by gang and track laborers. The average per hour—on an 8-hour basis—received by all division officers was \$1.73—less than 11 per cent greater than that of passenger engineers. And the average per hour received by all executives, general officers and assistants was \$3.15—only twice as great as that of passenger engineers.

The locomotive engineer's good job, and all other railway jobs,

Efficiency
FOR VICTORY

have been made possible by those who have saved part of their incomes and invested it in his locomotive and the rest of the railroad's property. The investment in railroads which provided jobs in 1942 averaged \$21,000 per employee. The locomotive and other railway property which investment has created is just as truly "productive" as the work of employees. And if investors are not rewarded in proportion to the productiveness of what they save and invest, who will continue to save, invest and provide railroad jobs?

One serious trouble with those who try simultaneously to promote full employment, greater peacetime production and equalization of incomes is that they do not know, or disregard, the *relationship between incomes, employment and production*. The more the incentive of opportunity for unequal rewards is reduced, the more the use of the brains and capital that increase employment and production will decline. There is available only one substitute for the incentive and driving force of unequal rewards. That is, the *coercion* applied by all communist and fascist governments.

And you must have *dictatorship* to apply *coercion*. But, in the long run, coercion is no effective substitute for unequal rewards; for while you can force men to work with their hands by lashing or threatening to shoot them, as is now being done in Europe, there is no means of making them use their brains excepting that of offering rewards proportionate to the effectiveness with which their brains are used.

The New Deal and every other socialistic and communistic program for "equalizing" incomes is a *program for eliminating ambition and brains from production* and necessitating substitution of governmental coercion. And nowhere in peacetime has governmental coercion ever been, or will it ever be, an efficient economic substitute for the unusual effort, saving and investment of free men having more than average ambition and better than average brains. Nature makes it impossible to equalize brains; and the inevitable long-run effect of equalizing incomes must be to reduce *all incomes* by reducing the effective use of better than average brains.

Tie Production On the Down Grade

Among the most disconcerting problems now facing railway officers is the need of an adequate supply of cross and switch ties. Admittedly the situation can be met insofar as the 1943 track requirements are concerned, but a glance at present inventories and a review of conditions in the producing territories leaves a firm conviction that the outlook for 1944 is dark.

Crosstie renewals by Class I line-haul railroads in 1942 amounted to approximately 57,500,000, as compared to 48,750,000 in 1941, 46,000,000 in 1940 and 44,200,000 in 1939. Inventories for these lines, as of January 1, 1943, reflect less than half the crosstie stock of the same period in 1929 and 1930. Based on the average 1940 renewals, crosstie stocks on January 1, 1943, were the lowest in 13 years and represented less than eight months supply.

Scattered reports from production areas are far from encouraging. Labor shortages, difficulties in obtaining sawmill and logging equipment, shortages and difficulties in obtaining motor trucks, repair parts, gasoline and tires, plus the unprecedented general demand for forest products—all tend severely to restrict the production of crossties. Current production on one of the roads which operates through fourteen mid-western states, and whose annual requirements are in excess of a million ties, is approximately 40 per cent of last year's. On one of the northwestern roads, where government regulations practically halted production late in 1942, current production is well below 80 per cent of that of last year, which in turn was substantially less than in 1941.

In the face of steadily growing traffic—an increase of 72 per cent in ton-miles and 129 per cent in passen-

ger miles during 1942 as compared to 1940—it is apparent that the lapse of time is a minor consideration in the service life of ties. Under present conditions ties are being worn out nearly twice as fast as in 1940. And, although some expedients may be adopted to promote better utilization of the ties now in track, present conditions point to the necessity for vigorous and concerted action on the part of railways and producers if adequate tie production is to be maintained.

Pre-Classification Should Be Extended

In the rush and furore of handling present-day wartime transportation, yardmasters are quite likely to shove cars along without too much regard for what happens to them in succeeding yards where they must be handled, in spite of the fact that pre-classification long ago showed its value. The systems devised for handling cars on the basis of overall terminal efficiency, instead of merely the convenience of one individual yard, have worked successfully for years on most railways.

With every yard working far beyond what was considered its capacity only a few years ago, pre-classification is more important now than ever. This is true particularly of the vital transcontinental movement, for if this record load is to be handled promptly and efficiently every possible means of improving operations must be applied to the movement. In effect, recent orders and appointments by the Interstate Commerce Commission and the Office of Defense Transportation have created one huge railway system west of Chicago, so far as traffic going through to the Pacific Coast is concerned. However, the present system of diverting



traffic from one route or segment of route to another as varying density of traffic dictates is not the only answer.

One of the most important intermediate terminal areas on the way to the Coast showed up through most of last year as a danger point, so far as congestion was concerned. It is an important interchange point for several railways as to through traffic and, in addition the area is full of war production plants and military establishments. Although the through traffic handled consists entirely of interchange between two railways and two other railways, a study disclosed that incoming trains were so arranged as to consist that they had to be switched in cuts averaging only about 4.5 cars. Appropriate steps were taken to correct this situation at yards up to 500 miles away, so that instead of dumping traffic helter-skelter into this congested terminal, pre-classification was conducted in yards where the congestion was not so great. As a result, for the past month, inbound trains have averaged 24 cars per cut, so far as switching in this terminal is concerned and the result has been that this hitherto chronically congested terminal area has become relatively fluid again and promises to continue in that desirable condition and to improve, as the average number of cars blocked in incoming trains increases.

In the transcontinental movement, there is ample opportunity for blocking cars for through movement to Pacific Coast points. True, this requires additional switching at points where the trains originate, but, busy as such terminals are, they are far less busy and subject to congestion than certain intermediate terminals or than all terminals on the Coast. Such blocking will not only relieve the coast terminals but it will also speed the overall movement. Yardmasters are only human and, at intermediate terminals, if they see a mixed consist for an incoming train, their natural reaction is to run it into the yard for future attention, while the train with a consist requiring little switching goes right on through.

Manufacturers on "Monopoly Practices"

"Jobs, Freedom, Opportunity" is the title of a pamphlet being distributed by the National Association of Manufacturers and containing a recent report by its Postwar Committee. It is perhaps the best statement that has emanated from any source of "the principles that must underlie any sound solution of postwar problems," and agrees with views repeatedly expressed lately in this paper regarding what private enterprise must do to maintain itself against attacks by promoters of a government-planned, dominated and spending economy. We quote elsewhere in this issue parts of the report dealing with "Domestic Requirements for Prosperity."

The report says: "Government investment . . . is without the guidance provided by the expressed de-

mands of consumers in the market place. . . . Public investment can in our opinion be justified only on the basis of a clearly felt need for specific public works." This by plain implication condemns government investment in waterways, highways and airways to provide transportation for which there would be "no demands in the market place" if not artificially created by government aid. We hope the manufacturers will consistently apply to transportation the principles they advocate for other industries.

Manufacturers of railway equipment and supplies are an important part of the manufacturing industry. Most of them belong to the National Association of Manufacturers. They cannot read the report of their Postwar Committee without seeing that it condemns practices long prevalent in parts of the railway equipment and supply industry. We especially call attention to the following:

"Every practice . . . restricting or stifling competition . . . tends to undermine the economic system. . . .

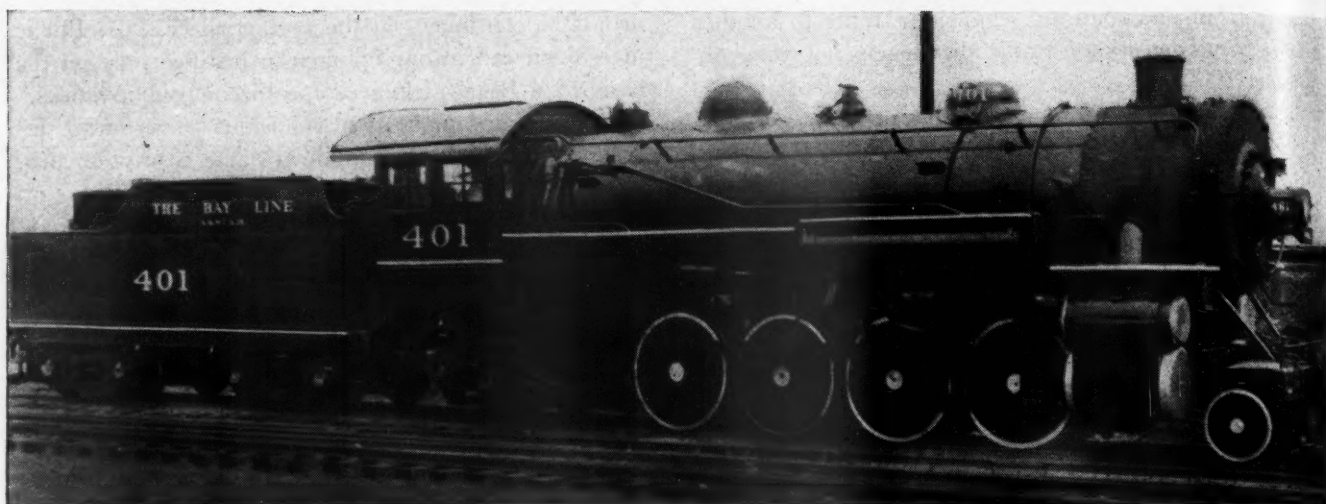
"One has a monopoly whenever he is in a position to control the price of what he has to sell. . . . The significant question is whether the power is used to the detriment of the general public. There may be monopoly practices in a given field even when none of the individual producers involved is a monopoly. For example, a group of producers, none of whom is in a monopolistic position, may agree to hold up prices, or divide the market in such a way that competition is eliminated, or join together in a price war against a newcomer in the field in order that once he is eliminated they may again lift the price to above a fair competitive level. . . .

"The purpose of a monopolistic practice is to 'gouge' the public, and there is never any offsetting advantage. . . . It is imperative that (such practices) be halted and proper penalties imposed."

Competition in various branches of the railway supply industry in providing new and better products at relatively lower prices has been restricted or virtually prevented by such practices as those mentioned, and by others such as "reciprocal buying." Everybody in the industry knows this; and it is evidenced by the reduction in its total competitive sales activities, including advertising, and the reasons often given for their reduction.

The railways need more of the right kinds of competition among those who manufacture for them. It is essential to technological progress, improvements of service and reductions of costs which the railways will require to meet competition and afford a large market after the war. Railway supply manufacturers should voluntarily and in their own selfish interest eliminate practices which in the present state of public sentiment are dangerous, are condemned as unsound by their own manufacturers' association, and are inimical to the railways. For it appears certain there will be more competition in the railway supply business after the war.

Many companies now in other fields which will have surplus capacity and new materials are finding that the railway field looks inviting. If many now in that field do not provide more competition that promotes railway progress, they will likely find "outside" manufacturers furnishing it after the war to the detriment of those now in the field.



One of the Mikado Type Steam Locomotives

Road-Switcher Diesel-Electrics In Short-Line Service

Operation on the Atlanta & Saint Andrews Bay shows how this type of motive power can be used to great advantage

THE recently revitalized Atlanta & Saint Andrews Bay Railway affords an excellent example of well-coordinated rail and truck operation and its use of Diesel-electric locomotives shows how this type of motive power may be effectively adapted to the requirements of short-line railways. By recent is meant the period beginning in 1934 when J. A. Streyer came to the railroad as general manager, later becoming president and general manager.

Since the time mentioned traffic has been built up, bad grade crossings eliminated, tie spacing decreased by increasing the number of ties from 2,750 to 3,300 per mile, open trestles converted to ballast decked trestles, tie plates added, crossing signals and reflector switch targets installed and the original sand ballast changed to slag ballast on 90 per cent of the line.

Three Diesel-electric locomotives were placed in service in 1941 to supplement the 12 steam locomotives then operated by the railroad. All three were in operation during the first eight months of 1942, and over this period valuable operating data were acquired indicating the potentialities of Diesel-electric locomotives which can perform both road and switching service. The use of the dual-purpose Diesel-electric locomotives was terminated by the government requisitioning the locomotives late in 1942.

Since that time two Diesel-electric switchers and two more steam locomotives have been acquired, but the comparative data in this article cover only the first eight months of 1942, during which period three road-switcher locomotives were in service.

The railroad is a single-track line running from Panama City, Fla., a deep-water harbor on the Gulf of Mexico, north 81 miles to Dothan, Ala., where the road con-

nects with the Atlantic Coast Line and the Central of Georgia. Thirty miles south of Dothan is Cottondale, Fla., where connection is made with the Louisville & Nashville.

The Atlanta & Saint Andrews Bay, commonly called the "Bay Line," has no branch lines. It has terminal yards and connects with several industrial spurs in Panama City. Over the 81 miles of main line there are seven 100-car (5,000 ft.) passing tracks. There is one 50-car siding at Youngstown, Fla., and a number of shorter loading tracks at various points. There is also a wye on either side of the ruling grade to allow for turnaround of helper locomotives. Grades are shown on the profile.

Bus and truck lines are also operated by the railroad beyond the limits of its own rails. These were described in the *Railway Age*, April 26, 1941.

Motive Power

Before 1936, freight traffic was handled by three 2-8-0 locomotives (20 in. x 28 in. cylinders) and a gas electric rail car was used for passenger service. In 1936, six Pacific type locomotives and two 6-wheel switchers were acquired from the Florida East Coast. This was followed by the purchase, in 1937, of four Mikado type locomotives from the New York Central Lines (Big 4). All steam locomotives burn oil.

The possible advantages of using Diesel-electric locomotives was considered in 1940, and a study of road conditions and operating requirements resulted in the development of the following locomotive specifications:

1. The locomotives must be used indiscriminately in road and switching service.

2. A 3,200-ton freight train must be moved in both directions over the profile.

3. Tractive force must be sufficient to obviate helper service.

4. Horsepower must be adequate to meet existing schedules.

5. Maximum operating speed must not be less than 70 m. p. h. to provide for passenger operation when required.

These specifications were met by the Alco-G. E. "Road-switcher" locomotives equipped with multiple-unit control. General specifications are shown in the table:

Principal Weights and Dimensions Of the Alco Diesel-Electric Road Switching Locomotives

	1,000 hp.
Length overall	54 ft.—11¾ in.
Width overall	10 ft.—0 in.
Height from rail	14 ft.—6 in.
Wheel base—rigid	9 ft.—4 in.
Wheel base, total	40 ft.—4 in.
Truck wheels, diameter	40 in.
Total locomotive weight	240,000 lb.
Weight on drivers	240,000 lb.
Starting tractive force	72,000 lb.
Maximum speed	70 m. p. h.
Minimum radius curvature, locomotive alone.....	100 ft.

The Bay Line locomotives were the first of this type. They differ from the 1,000-hp. switcher in that they have a longer wheelbase allowing for higher speed operation and they have a short hood at the end of the cab opposite the engine hood which may be used for a heating boiler or as a place for the electrical control equipment. Also they are equipped with multiple-unit control.

In 1941, the Bay Line carried 1,326,048 tons one mile per mile of road; the percentages of empty and loaded freight cars handled were respectively 48.8 and 51.2. In 1942, the tons carried one mile were 1,798,890; the per-

centages of empty and loaded freight cars handled were respectively 46.2 and 53.8. The bulk of the traffic consists of steel, pulp wood, paper board and wall board, petroleum products and fertilizer.

All l. c. l. freight for stations between Dothan and Panama City is handled by highway trucks. A paved highway parallels the railroad for its entire length and the distance from any station to the highway is not more than ¼ mile. L. c. l. freight for delivery to points on the southern half of the railway is shipped by rail to Panama City, and all for delivery on the northern half goes to Dothan.

Loaded highway trucks leave both terminals running the length of the line, north and south respectively, delivering and picking up freight at intermediate stations. By this procedure the heavy hauling is limited to short distances near each end of the line and no freight train need stop at a way station to deliver or pick up l. c. l. freight.

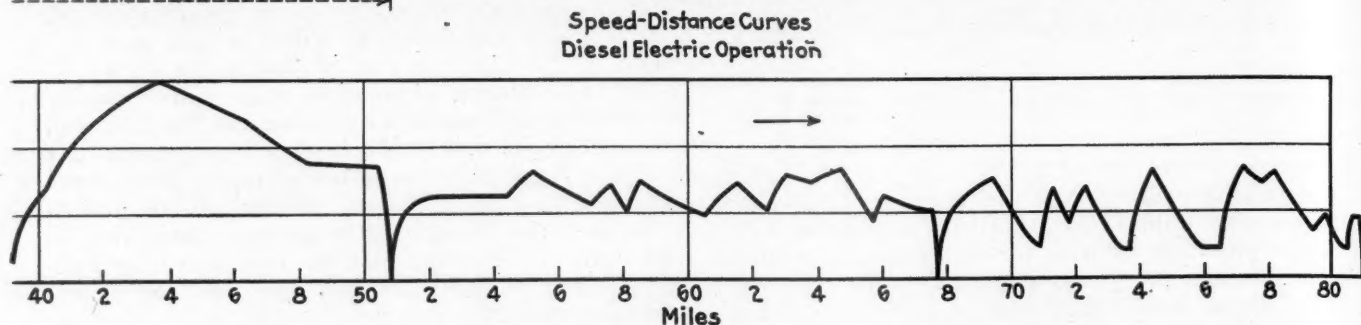
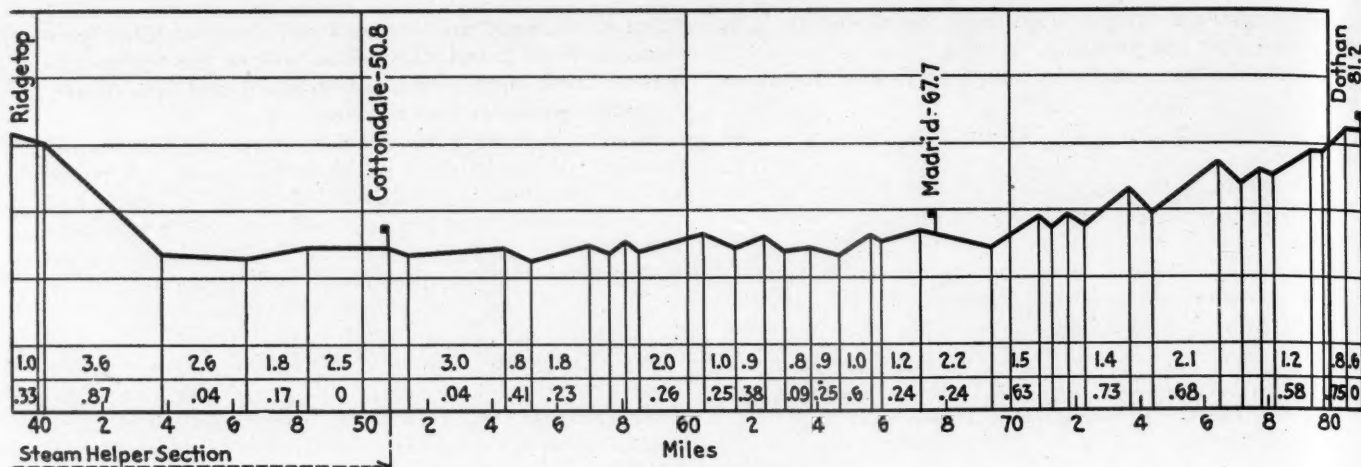
The Diesel-electric locomotives were used separately for switching in Panama City during the day time and, connected two in multiple for hauling freight trains over the entire length of the main line at night. Since there were three of them, the operating data are not quite as favorable to the Diesel as it would be if there were an even number. The third unit was used as a relief locomotive when necessary and was also used for hauling passenger trains.

The daily program included one round trip over the road for two locomotives operating in multiple hauling 60-car or 3,200-ton trains, and switching tricks varying from 8½ to 11 hours for the units operating separately.

The usual method of operating steam locomotives in freight service consists of using two locomotives for haul-



The Diesel Locomotives Are Equipped with Multiple-Unit Control for Road Freight Operation



No. of Cars	80	Wt. of Train (Total)	3,430 Tons	Calc. Running Time	3 Hr.-57 Min.
Wt. of Cars	3,200 Tons	Locomotive Capacity	2,000 Hp.	Av. Running Speed	20.5 M. P. H.
Wt. of Loco.	230 Tons	Coef. of Adh. on 1.0% Grade	18.6 P. C.	Output at Wheels	5,930 Hp. H.

Comparison of Operating Costs Between Diesel and Steam Locomotives for Typical Month, 1942

The same comparison is applicable for all months between February and October, 1942

SWITCHING SERVICE					ROAD FREIGHT SERVICE				
Assigned Hours.....	Diesel 809	Steam 327	Total 1,136		Gross Tons Handled (000's).....	Diesel 118	Steam 215	Total 333	
Operating Expenses & Fixed Charges					Operating Expenses & Fixed Charges				
Acct.	Per Hr.	Total (1 Mo.)	Per Hr.	Total (1 Mo.)	Acct.	Per 1,000 T.	Total (1 Mo.)	Per 1,000 T.	Total (1 Mo.)
308-311 Locomotive Repairs.....	\$.316	\$ 256	\$3.240	\$1,060	308-311 Locomotive Repairs.....	\$4.800	\$567	\$10.640	\$2,060
380 Enginemen.....	1.680	1,359	1.730	566	392 Enginemen.....	5.300	625	10.770	2,315
382 Fuel.....	.319	257	1.910	626	394 Fuel.....	4.950	585	21.110	4,539
385 Water.....	.....	.....	.107	35	397 Water.....	.....	.....	1.250	269
396-7-8-9 Lubricants, other supplies, enginehouse expenses, yard supplies and expenses.....	.210	170	.159	52	398-9-400 Lubricants, other supplies and enginehouse expenses..	2.510	296	1.470	315
378 Trainmen.....	2.270	1,833	2.330	763	401 Trainmen.....	4.500	530	9.170	1,971
Total.....	\$4.795	\$3,875	\$9.476	\$3,102	403 Train Supplies & Exp.....	1.230	145	.910	196
Fixed Charges					Fixed Charges				
Interest.....	\$.176	142	.....	.....	Interest.....	\$ 2.660	\$ 314	.....	.....
Depreciation.....	1.680*	1,356*	\$.214†	\$ 70†	Depreciation.....	25.460*	3,004*	\$1,590†	\$ 342†
Insurance.....	.018	15	.009	3	Insurance.....	.288	34	.065	14
Taxes.....	.109	88	.110	36	Taxes.....	1.660	195	.437	94
Total.....	\$1.983	\$1,601	\$.333	\$ 109	Total.....	\$30.068	\$3,547	\$2,092	\$ 450
Grand Total.....	\$6.778	\$5,476	\$9.809	\$3,211	Grand Total.....	\$53.357	\$6,295	\$57,412	\$12,343
Summary					Summary				
Steam Operating Expenses per Hour.....			\$9.476		Steam Operating Expenses per 1,000 G. T.....			\$55.320	
Diesel Operating Expenses per Hour.....			4.795		Diesel Operating Expenses per 1,000 G.T.....			23.290	
Gross Diesel Saving per Hour.....			\$4.681		Gross Diesel Saving per 1,000 G.T.....			\$32.030	
Steam Oper. Ex. & Fixed Charges per Hour.....			\$9.809		Steam Oper. Ex. & Fixed Charges per 1,000 G.T.....			57.412	
Diesel Oper. Ex. & Fixed Charges per Hour.....			6.778		Diesel Oper. Ex. & Fixed Charges per 1,000 G.T.....			53.357	
Net Diesel Saving per Hour.....			\$3.031		Net Diesel Saving per 1,000 G.T.....			\$4.055	
Diesel Saving over Steam—809 Hr. (Gross).....			\$3,787†		Diesel Saving over Steam—118,000 G.T. (Gross).....			\$3,776†	
Diesel Saving over Steam—809 Hr. (Net).....			2,443		Diesel Saving over Steam—118,000 G.T. (Net).....			481	
† Eliminating all fixed charges									

ing 72-car trains between Panama City and Cottondale, and one between Cottondale and Dothan. One locomotive is wyeed at Cottondale, from which point it returns with a southbound train to Panama City. Traffic conditions, of course, require variations from this schedule.

Maintenance

The railroad has a small but quite complete shop for maintaining its locomotives at Panama City. Maintenance of the Diesels over the period in which they were operated consisted almost entirely of routine inspection and minor running repairs with meticulous attention to the cleaning of filters, changing of oil on 25,000—rather than 30,000 mile intervals—keeping truck wheels in rectangular alinement, cleaning of electrical contacts, etc.

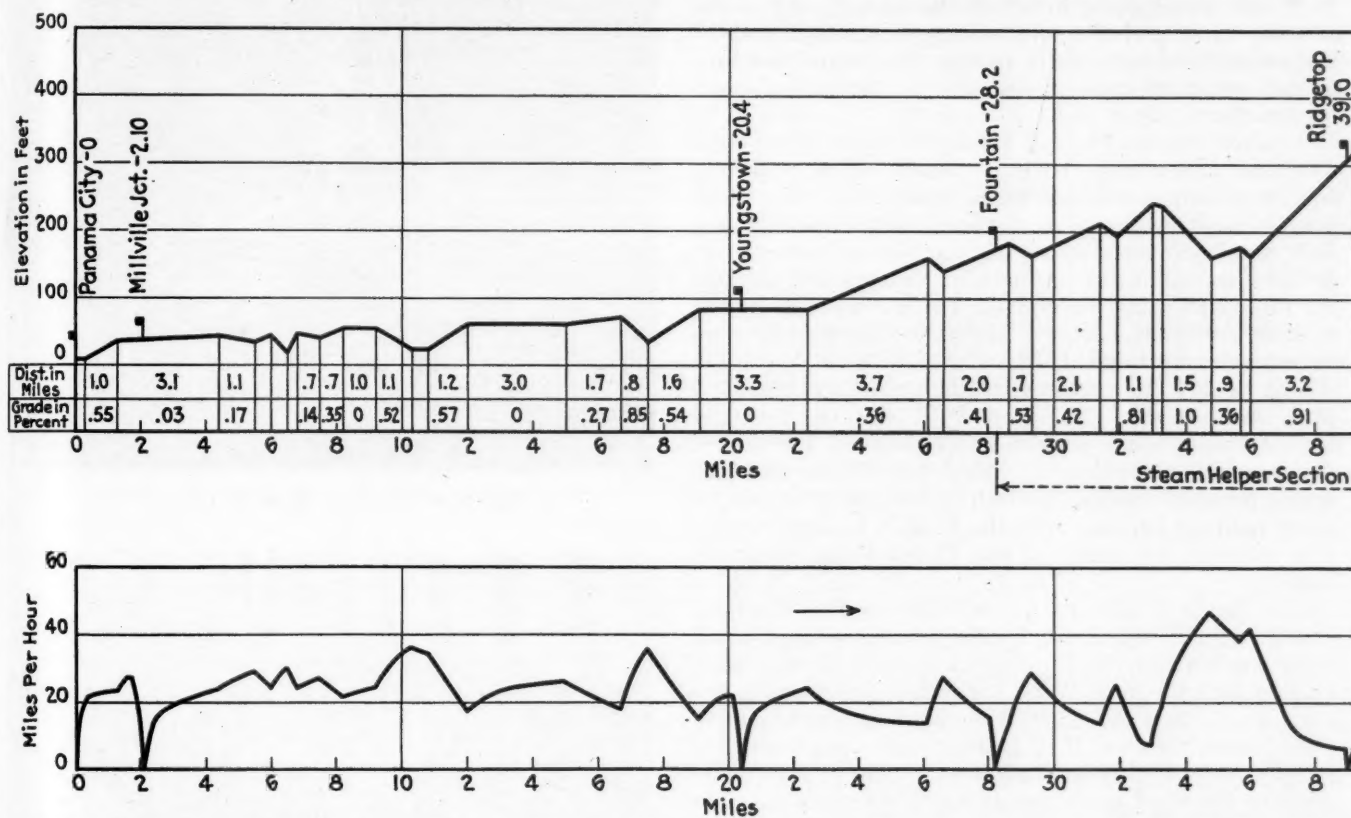
No major trouble was experienced with any of the lo-

comotives and when turned over to the government, cylinder liners showed less than one ten-thousandth-inch wear. As of December 31, 1942, the road's investment in road and equipment is shown as \$2,782,134. Gross earnings and net revenues (excluding taxes) were \$1,988,687 and \$1,137,182, respectively. This represents an operating ratio for 1942 of 42.8 per cent and gross earnings were 71.48 per cent of the capital investment.

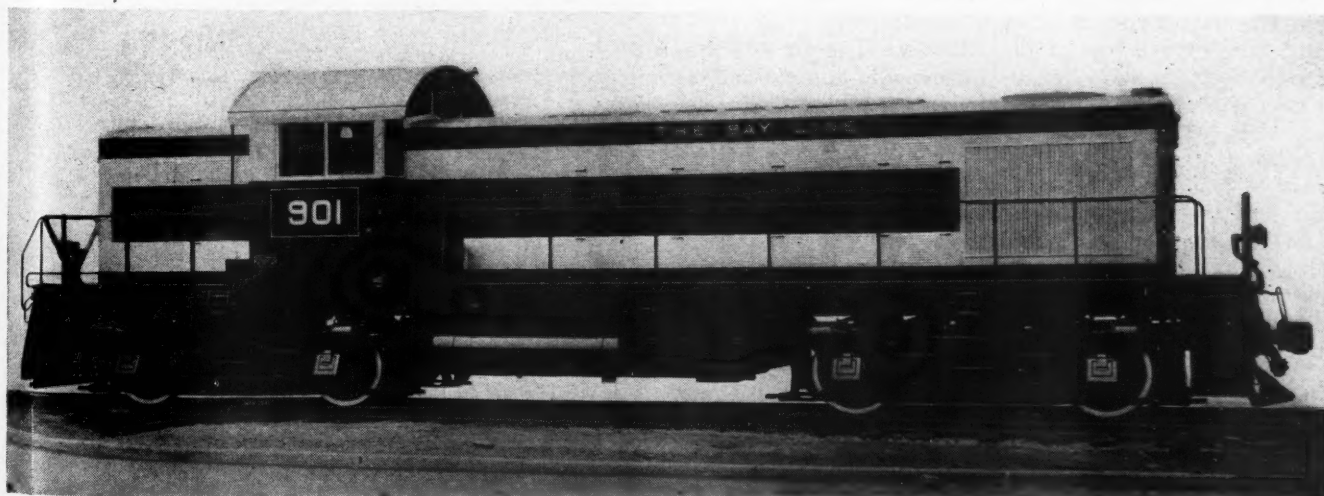
Operating Costs

Relative costs of operating steam and Diesel-electric locomotives are given in the large table. These figures cover a period of one month which is typical of the first eight months when the three road-switcher locomotives were in service. In studying them, it should be borne

(Continued on page 858)



Condensed Profile and Speed-Distance Characteristics, Atlanta & Saint Andrews Bay Ry., Panama City, Fla., to Dothan, Ala.



The Diesel Locomotives Are Geared for 70 Miles an Hour and Can Be Used for Switching, Freight or Passenger Service

Interlocking with Novel Features On Peoria & Pekin Union

New scheme of aspects used in all-relay electric interlocking which has 13 levers as compared with 76 in previous mechanical plant

AT Pekin, Ill., the Peoria & Pekin Union has recently replaced a 76-lever mechanical plant with an electric interlocking in which the controls are of the all-relay type, and the interlocking is accomplished by interconnections of circuits so that the control machine utilizes miniature-type levers with no mechanical locking or electric lever locks.

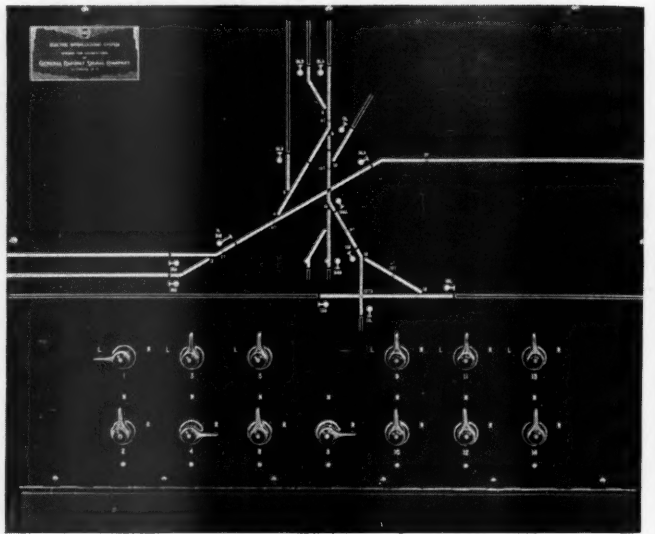
Between Peoria, Ill., and Pekin, 8.5 miles, the Peoria & Pekin Union main line is double track, and was equipped with centralized traffic control in 1931. The double track terminates at the south end at Switch No. 2 in the Pekin interlocking beyond which point the P. & P. U. main line extends as a single-track line through the interlocking and beyond the Pekin station to a connection with the Chicago & Illinois Midland, which continues on to Springfield, Ill.

The C. & I. M. operates freight trains over the P. & P. U. into Peoria. The P. & P. U. has no passenger service but operates freight trains between various industries and connections in Pekin and Peoria, and furnishes terminal facilities as well as switching service for seven roads in Peoria. Also the P. & P. U. interchanges cars with all 14 roads in the Peoria-Pekin switching district.

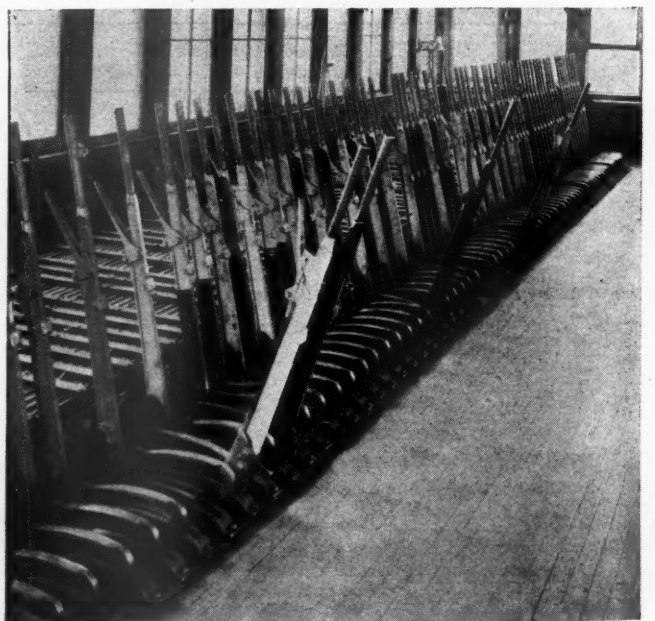
The Peoria & Eastern, a subsidiary of the Cleveland, Cincinnati, Chicago & St. Louis, operates a single-track main line between Indianapolis, Ind., and Pekin. Connecting with the P. & P. U. via switch No. 4 and crossover No. 6, the C. C. C. & St. L. line also extends westward across the P. & P. U. track to an enginehouse and south along the river bank about two miles to various industries via what is known as its Whiskey main. The C. C. C. & St. L. operates 4 passenger trains, as well as several freight trains, daily over the P. & P. U. between Pekin and Peoria, and also makes numerous switching movements through the Pekin interlocking.

A single-track line of the Atchison, Topeka & Santa Fe connects its main line at Ancona, Ill., and extends to Pekin, connecting with the P. & P. U. at Pekin via switches No. 6A and No. 4. The A. T. & S. F. does not operate trains over the P. & P. U., but does interchange cars with its own power with various lines at Pekin through this interlocking plant.

The Chicago, Rock Island & Pacific has a single-track freight transfer line between Peoria and Pekin, known as the Peoria Terminal Company. This line crosses the Illinois river just west of the interlocking, then crosses the River track of the P. & P. U., and connects with the Peoria & Eastern's Whiskey main at switch No. 12A. Then by contractual arrangement with the Peoria & Eastern, this Rock Island route crosses the P. & P. U. main line and extends eastward through the interlocking plant and the P. & E. passing track and crossover, where deliveries are made to the Santa Fe. The Rock Island also uses the P. & E. Whiskey main southward



The New Machine With 13 Levers



The Old Machine With 76 Levers

through the interlocking plant to a connection with its own yards and industries south along the river.

An Illinois Central single-track line from Mattoon, Ill., and Decatur connects with the P. & P. U. main line at a point 1,592 ft. south of the interlocking at Pekin and operates freight service only over the P. & P. U. between Pekin and Peoria. A check over an extended

period prior to the construction of this new plant indicated that there are more than 80 movements through this interlocking plant each 24 hours.

The mechanical interlocking, as installed in 1902, included detector bars and wire-connected mechanical semaphore signals. No track circuits or electric lever locks were provided. Thus the interlocking included numerous features which were not in accordance with the requirements of the Interstate Commerce Commission. Furthermore, the plant as a whole was worn beyond the stage of economical repair and maintenance. Therefore, a decision was made to replace the old mechanical equipment with a new electric interlocking.

Layout Simplified as Initial Step

Having reached this decision, the various railroads co-operated in making certain track changes to simplify the layout. A crossing between the P. & P. U. River track and the P. & E. Whiskey main was eliminated by taking up an old house track, and making some changes in switches beyond the interlocking limits, but no interlocked switches were added. A crossover on the C. C. C. & St. L., as well as certain other switches leading to industries, were moved beyond home signal limits, and other switches and tracks were eliminated. Main-line derails were also eliminated, the only derails in the new layout being on the enginehouse tracks of the C. C. C. & St. L.

These derails are of the Hayes type and are pipe-connected to and operated by the switch machine at switch No. 14, so that no extra switch machines are required for derail operation.

The switch X on the lead into the C. C. C. & St. L. enginehouse is operated by a hand-throw stand. Each of the remaining switches within the interlocking limits

quired in the old mechanical machine, only 7 levers are required in the new plant to control 9 switches. Both ends of the crossover, No. 6A and No. 6B, are controlled by lever No. 6. The switches 12A and 12B, at the two ends of the connecting track, are controlled by lever 12.

Special Aspects

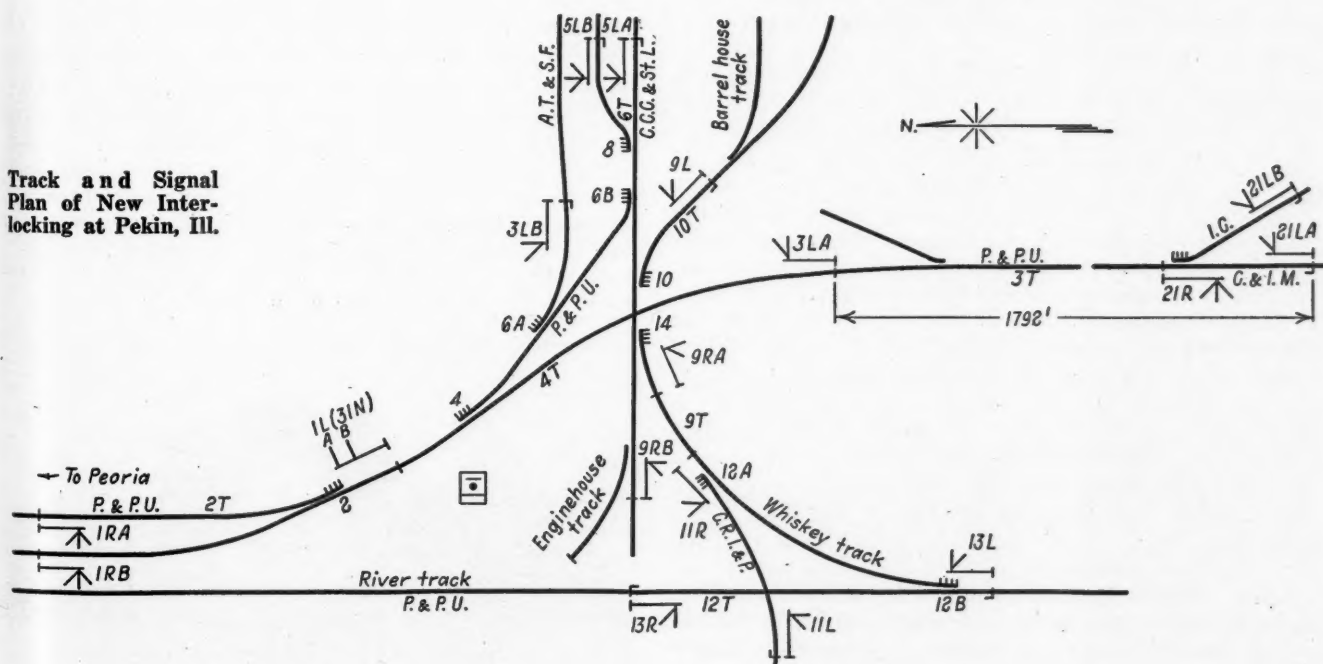
On the old plant, wire-line connections were used for the operation of the two-aspect lower-quadrant semaphore home signals, including 15 high signals and 14 dwarfs. As a result of the various track changes, only 13 color-light home signals were required in the new interlocking. By using three-position levers, each of which is thrown to the left to control one signal and to the right to control another, only six signal levers are required to control 13 signals, whereas in the old mechanical plant, 15 signal levers were required to control 15 home signals.

Practically all the routes through this plant include tracks with heavy curvature, in some instances as high as 12 deg. Furthermore, the tracks cross several streets. For these reasons, the speed of all trains within this area is limited to 6 m. p. h.

Therefore, no distant signals were required, and all home signals are of the dwarf type. Also, on account of the speed limit, the interlocking home signals do not display the Clear aspect, green. The "best" aspect displayed is yellow.

With respect to signaling, the train operation through this plant is peculiar. For example, the enginemen, especially of southbound trains of the C. C. C. & St. L., the A. T. & S. F. and the I. C., should be informed by the aspects and indications that the route lined up leads to their particular railroad or route through the plant. For this reason, certain signals display route aspects in

Track and Signal Plan of New Interlocking at Pekin, Ill.



is equipped with a 110-volt d-c. switch machine. These are the latest design of the G. R. S. Co. Model-5C machines with the outboard brake. The track changes reduced the number of switch machines required within home signal limits to nine, as compared with 37 switches and derails in the old mechanical plant. As a result, whereas 49 switch and facing-point lock levers were re-

quired in the old mechanical machine, only 7 levers are required in the new plant to control 9 switches. Both ends of the crossover, No. 6A and No. 6B, are controlled by lever No. 6. The switches 12A and 12B, at the two ends of the connecting track, are controlled by lever 12.

The unique feature of the signal aspects used on this plant is that advantage has been taken of the fact that electric lamps can be illuminated or extinguished as desired, whereas semaphore arms and constant-burning oil



New Color-light Signal Compared With Old Semaphore in Background

lamps cannot readily be made to appear or disappear. Each home signal consists of an assembly of either two or three G. R. S. Co. Type-F, light units, mounted vertically. Each unit is equipped with a $5\frac{3}{8}$ -in. lens. In a signal with only two lamps, one has a red glass and the other a yellow glass, while in the signals which have three lamps, the center one has a red glass and the bottom and top units have yellow glasses. Normally, a single red light is displayed as the Stop aspect by all interlocking home signals.

For a signal which can lead to only one route, such as southbound signal No. 13R on the P. & P. U. River track, the Proceed aspect, a single yellow light, is displayed in the upper unit. Thus this signal can display only two aspects, red for Stop or yellow for Proceed, this being accomplished by two lamp units. Likewise, signal No. 9RA has only two lamps. The normal aspect is red for Stop. An aspect of yellow-over-road is displayed for a route with switch No. 4 normal to lead up to C. T. C. signal No. 828. Thus signal No. 9RA can display only two aspects. Signal No. 9L on the Barrell House track, likewise, has only two lamp units, but it displays any one of three aspects. A single red in the upper unit is the Stop aspect. An aspect of yellow-under-red indicates that a route is lined up for a train to proceed as far as signal No. 11R, whereas an aspect of a single yellow indicates that a route is lined up for a move into the C. C. C. & St. L. enginehouse. Thus, three different aspects are derived from two lamps.

Other signals, for example No. 5LA on the C. C. C. & St. L., have three lamps. A single red in the middle unit is the Stop aspect, an aspect of yellow-over-red on signal No. 5LA indicates that a route is lined up via crossover No. 6 and single switch No. 4, both reversed, for a train to proceed as far as C. T. C. signal No. 828. An aspect of yellow-under-red indicates that a route is lined up with crossover No. 6 and single switches No. 8 and No. 14 normal, for a train to proceed as far as signal No. 11 R. An aspect of a single yellow indicates that a route is lined up with switch No. 8 normal, crossover No. 6 normal, switch No. 14 reversed, for an engine

to move into the C. C. C. & St. L. enginehouse. Thus the three lamps of signal 5LA can be used to display any one of four aspects. Likewise, signals No. 5LB, No. 1RA and No. 1RB are capable of displaying any one of four aspects.

The signals are set on concrete foundations. When located between tracks with 13-ft. centers, where the clearance is limited, the signals are set on the bases so that the maximum height is 2 ft. 8 in. above the level of the top of the rail. Where clearances are not restricted, the signals are mounted on short pipe masts long enough to bring the center of the lower lamp 3 to 4 ft. above the level of the top of the rail.

This interlocking project was planned and installed by the forces of the Peoria & Pekin Union under the direction of E. H. Thornberry, chief engineer. L. R. Coleman was foreman in charge of construction, and John Dunker is signal supervisor. The major interlocking equipment was furnished by the General Railway Signal Company.

Diesel-Electrics In Short Line Service

(Continued from page 855)

in mind that the steam locomotives cost less than one-seventh as much per unit as the Diesels and that the depreciation rate on the steam locomotives is 4 per cent while that for the Diesels is 20.

The gross savings effected by the Diesel-electric locomotives is \$3,787 per month and in road service \$3,776 per month. This represents an annual saving of more than $33\frac{1}{3}$ per cent on the total investment in Diesel-electric locomotives.

Under a longer operating period which would include major repairs, the maintenance costs for the Diesel locomotives would probably be somewhat greater than those shown in the table, but the overall advantage of Diesel-electric operation is so great as unmistakably to show the desirability of using it for this application.

Eight additional road-switcher locomotives have been ordered by the railroad and to date four have been approved. When the eight can be obtained, the railroad will be completely Dieselized.

* * *



W. H. Schmidt, Jr.

The International-Great Northern's Passenger Station at San Antonio, Tex.

How to Assure Postwar Prosperity

Manufacturers would restore private financing, oppose monopoly practices and large public works outlays

THE National Association of Manufacturers has issued a booklet entitled "Jobs, Freedom, Opportunity," in which it sets forth the economic conditions which probably will face this country at the return of peace—and then enumerates the principles and policies which must be followed if full employment of the working force is to be resumed under conditions of free enterprise. Following are extracts from this booklet, appearing under the chapter-heading "Domestic Requirements for Prosperity"—i.e., that part of the N.A.M. program directly applicable to business policy within the country.

In the domestic sphere the government should establish and properly administer legislative and fiscal policies that will provide the framework which will best enable business to operate in ways that will produce the utmost in goods and services for the nation. If the government attempts to go beyond this and tries to conduct or direct business, the effect is certain to be a reduction in the volume of goods and services available to the public and in consequence a net loss for the nation as a whole.

Competition and Monopoly

... When there are many purchasers who wish to buy many different kinds of goods—which will be the general postwar situation—society is most benefited by healthy and vigorous business competition. . . . Every practice which by restricting or stifling competition imposes a burden of unnecessarily high prices on the consumer, tends to undermine the economic system and works to the detriment of society as a whole. The prevention of such practices is what may properly be thought of as the postwar monopoly problem.

In thus defining the monopoly problem it will be noted that by implication a distinction is made between monopolies as such and monopolistic practices. Technically, one has a monopoly whenever he is in a position to control the price of what he has to sell. The mere existence of this power to control the price, however, is not the only consideration. The significant question is whether the power is used to the detriment of the general public. There may be monopolistic practices in a given field, even when none of the individual producers involved is a monopoly. For example, a group of producers, none of whom is in a monopolistic position, may agree to hold up prices, or divide the market in such a way that competition will be eliminated, or join together in a price war against any newcomer in the field in order that once he is eliminated they may again lift the price to above a fair competitive level. All of these would be examples of a monopolistic practice, regardless of the number of producers involved, and though no single producer controlled as much as 5% of the total output. . . .

The purpose of a monopolistic practice is to "gouge" the public, and there is never an offsetting advantage. When such detrimental practices are discovered, therefore, it is imperative that they be halted and proper penalties imposed. Only by doing this without fear or favor, and regardless of whether ten or a million persons are involved, will it be possible to maintain that progress in the economic system which is essential to a rising standard of living and to jobs, freedom, and opportunity in the postwar period.

Cost and Price Rigidities

A prime essential to the utilization of the productive facilities of the nation and to the attainment of maximum employment after the war is to bring about relationships between prices which will provide a basis of fair exchange. Reduced to simple terms "all

business is an exchange of services," whether the services be those of labor, of the farmer, of the manager, or of the saver and investor who provides the capital for the tools and takes the risks in new ventures. The volume of business, of new investment, of physical production, and hence of employment, is dependent upon relationships between prices of goods and services which promote exchange of maximum quantities. Real prosperity and maximum employment result from such exchange, and not from money wages or money prices.

A condition of balanced price relationships conducive to a high volume of exchange of goods and services is characterized by low prices; that is, prices low in relation to existing incomes. This does not mean prices low or high in comparison with prices at some period in the past. In a dynamic and forward-moving economy it is not possible to recreate the exact relationships that existed at some prior date, or to impose static conditions, without destroying the dynamic qualities essential to progress and growth.

The outstanding accomplishment recorded in the history of our economic development is the amazing progress made in raising the standard of living to levels never before attained. What perhaps is too little understood is the process by which this was achieved. It was a process of continuous reductions of costs and prices of the goods and services which people needed and desired; reductions not necessarily as measured in terms of money values, but in the ability of people to exchange their service for an increasing quantity of goods and services coincident with a decrease in hours of work required. This result has been achieved through passing on to the whole body of consumers the gains flowing from technological progress and from providing workers with better tools and more efficient methods of production.

There is great danger that, following this war, efforts will be made arbitrarily to maintain price relationships existing at the war's end, instead of facilitating the adjustments that may be essential to the attainment of an equilibrium that will enable the various groups engaged in productive activities to buy each other's products with their own. Such efforts to maintain current price relationships would tend to crystalize maladjustments and distortions, restrict the markets for goods on which costs have been increased, and cause unemployment. Such unemployment in turn leads to a demand that government should undertake public works beyond any justifiable need, through government deficit financing, as a means of providing work for the unemployed and of maintaining the total dollar national income, without regard to the fact that this will not produce an equivalent real national income, and without regard to the ultimate end of such a program.

Financing of Business

Regardless of what is done in all the fields above referred to, it will still not be possible to provide the jobs necessary to create and maintain prosperity in the postwar period and to make full use of the great postwar productive capacity of the nation . . . unless there are established those conditions which will assure an adequate flow of investment and venture capital into American industry. . . .

It must be recognized that "profits" represent a reward for the taking of risks, and that unless there is a hope of "profits" job-making risks will not be undertaken. . . . If one looks back over the development of our country he finds that there has been a direct and unfailing relationship between the volume of investment and the ability of our workmen to find jobs. In periods of full investment there has been full employment; in periods when the public for one reason or another was unwilling to risk its savings in buying machines and buildings to be used for the production of goods, there has been unemployment, with our workers



unable to find jobs which would enable them to use their strength and their ability to turn out the commodities and perform the services which the public would like to have.

Since investment is the means of increasing the productive capital of the nation it is of great importance that the investment function should be primarily in the hands of private enterprise, rather than in the hands of governmental agencies. Business has the primary function of utilizing the productive facilities of the nation for the creation of goods and services that people are willing to buy at prices which cover the costs of production. Governmental investment, on the other hand, is without the guidance provided by the expressed demands of consumers in the market place. Public investments take the form of "projects" without much regard to whether they will ever "pay out," either in the commercial sense or in terms of the public interest.

Public "Investment" a Dangerous Expedient

Public investment can in our opinion be justified only on the basis of a clearly felt need for specific public works. The social dangers and wastes from an extravagant entry into the field of so-called public investment programs are so great that they should not be countenanced as a device for the relief of unemployment or for accomplishing other economic controls.

... Many people assume that before there can be investment there must be purchasing power in the hands of the public for the buying of the products which are to be produced. This assumption is erroneous. Purchasing power comes from the production of goods and the rendering of services. A man producing a commodity or rendering a service receives a wage. This wage constitutes his purchasing power and enables him to buy the products of his fellow workers. So it is throughout the entire economic system. In a word, *it is investment which creates jobs, and jobs which create purchasing power.*

If there is to be assured adequate investment to provide factories, machinery, and tools to give jobs to the workers of the nation in the postwar period, certain policies are necessary. Investment represents savings previously earned, but not immediately spent. There will not be such investment in plants and equipment unless there is a surplus available for investment, unless the public who have such surpluses are willing to make the investment in the belief that it is reasonably secure and has a prospect of earning a return, and unless there are the proper organizations to bring borrower and lender together under mutually beneficial conditions. In practice this means the following:

(a) There must be a tax system which makes possible the maintenance of adequate liquid working capital and the setting aside of adequate reserves, by industry, as well as the accumulation of a surplus by individuals. . . .

(b) There must be a general attitude on the part of government which will encourage the investment of such surpluses in private enterprise. This means specifically the avoiding of unnecessary disturbances to the confidence of the public in the long-term outlook of the individual enterprise system, such as is caused by governmental antagonism to privately conducted business, government competition with business, the imposition of unnecessary restrictions, the substitution of discretionary regulations for clean-cut policies as formulated by law, or the sponsorship of measures which if enacted would place unbearable burdens upon our productive organization.

(c) For centuries the prosperity periods of nations have been definitely linked up with the flow of private capital into industry. In recent years this flow of private capital has been impeded by over-restrictive laws and regulations governing the issuance of new securities. The average annual offering of new private capital issues for the decade beginning in 1920 was \$3,750,000,000; during the next decade it was only \$1,090,000,000. . . .

This means that there should be a thorough and careful review of the present regulation of capital markets and security exchanges with a view, not to lessening to any degree the protection of the public against fraud, but to removing those controls and eliminating those restrictions which contribute nothing to the protection of investors but are a needless hindrance to capital flotation, to trading in securities, and to speculative investment which starts new industries and provides new jobs. . . .

Without attempting to set forth in detail just how the labor relations problems of postwar years should be met, we believe the general principles to be followed should include:

(1) Recognition that monopoly and monopolistic practices in the field of labor are as harmful to the public interest as monopoly or monopolistic practices are in either manufacture or distribution.

(2) Recognition that the basic purpose of legislation designed to control wages and hours should be social and not economic, that it should be strictly confined to the social objectives of preventing exploitation and protecting a decent standard of living. Such legislation should never be designed or used to lift the whole wage structure, to prevent the employment of those persons who through part-time work can earn a portion of their upkeep, or to set a general wage standard for the country as a whole.

(3) Recognition that the fixation of maximum wages by law is undesirable during peace times in all instances. It destroys the initiative of workmen, undermines the use of wages as an incentive for accomplishment, and makes it exceedingly difficult for employees to advance on the basis of demonstrated ability.

(4) Recognition that the greatest fairness to employees is promoted when they are given an opportunity to advance; when they are placed in the jobs for which they are best fitted; when methods are established to measure their accomplishment; and when they are compensated in relation to the comparative value of the job on which they are working and the amount of work they perform.

(5) Recognition that work training and retraining will be needed for many of those returning from the armed forces and those leaving war production jobs.

(6) Recognition that the primary basis for selection, retention, and promotion of employees should be their ability, but that, where other factors are equal, length of previous service should be a governing factor in retention and promotion.

(7) Recognition that employees have a right to represent themselves in dealing directly with their employers if they so desire, and that when they desire to have others represent them they should be entitled to choose such representatives without coercion of any kind.

(8) Recognition that employees have an equal right to join or not to join a labor organization.

(9) Recognition that labor unions should be held to a responsibility equal to that of business.

(10) Recognition that while employees possess a right to quit work, either individually or collectively, they have no right to prevent others from working and no right to intimidate customers. In the interest of employees, no strike should occur which has not been approved in a secret ballot by a majority of those directly involved. In the interest of the public, limitations may properly be placed upon the right to strike of employees engaged in essential public services, and strikes of government employees should be prohibited.

(11) Recognition that collective negotiation between employers and employees should be used for the purpose of finding the best possible, and the most just, solution of their mutual problems, without compelling either to surrender basic principles, without establishing or requiring coercion of third parties, and without collusive agreements between them to the disadvantage of consumers. . . .

Agriculture

The economic well-being of the American farmer after the war is of paramount importance to the whole national economy. The preservation of a prosperous and economically sound American agriculture is necessary as a foundation of our national economic structure. The productive capacity of American agriculture in the years immediately after the war may be the means of preventing starvation in large sections of the world.

Industry, labor, and all other groups must recognize this important and essential place of the farmers as producers of food, large consumers of manufactured products, and employers of labor; and they must also recognize that there can be no sound, balanced economy unless the farmers have their fair share therein. . . .

We urge that the following suggestions, which represent the best practices and current thinking in industry, be considered by each manufacturing business management as an effective aid to meeting postwar problems:

Recognize that business management has a responsibility to consumers to see that goods and services are made available at



fair prices; that it has a responsibility to its employees to maintain maximum employment; that it has a responsibility to its communities to help maintain sound civic and commercial conditions; and that it has a responsibility to its stockholders to earn a reasonable return on, and to protect, their investments.

Avoid so far as possible rigid, inflexible prices and rigid, inflexible costs. . . .

Make every effort to bring about the ultimate restoration of competition . . . for it is through competition we get the rivalry among business enterprises which leads them to produce new and better things at lower prices for consumers.

Provide a fair wage determined with due regard to the nature, quantity, and quality of the work, and to all the conditions under which it is performed, including skill, accomplishment, responsibility, experience, physical demands, and hazards. . . .

Provide for management research to review every present, prospective, and possible activity of the company with a view to developing new products and increasing productive efficiency, thereby protecting the future welfare of the company, its customers, and its employees.

Carry on research which will increase productivity to permit lower unit costs of production and lower prices to consumers, and will discover methods of improving existing products and finding new uses for them. Such research should include the possibility of wider industrial use for agricultural products. . . .

Have ready for immediate adoption in the postwar period plans and methods for retraining the large number of employees who are now engaged in war production work of a special character and those who will be returned to industrial work from the armed forces.

Other Informative Pamphlets on Post-War Prospects

A booklet issued by the Committee for Economic Development (care Department of Commerce, Washington) is entitled "Preparing for High Levels of Employment When the War Ends." It examines the task which the nation faces in providing jobs when peace comes—both for returning soldiers and for such of the present working force who will desire to continue in employment. The Committee for Economic Development is not a governmental body despite the fact that it has its headquarters in the Department of Commerce. Its members are all business and industrial leaders, the chairman being Paul Hoffman of the Studebaker Corporation.

Some government officials do not believe that private industry can successfully provide all the post-war employment which will be sought—and, consequently, are preparing huge programs of public works expenditures to "take up the slack." There are many dangers in such a program, among them (1) that it would entail large taxes on free enterprise, thereby constricting private employing power and engendering demands for still more work-making government outlays; (2) that such large untaxed "investment" by the government would inevitably compete inequitably with tax-paying private enterprise—carrying the country a long way toward socialist totalitarianism; (3) that a large government public works program, on top of the war outlay, would entail further large federal deficits, threatening the solvency of the whole monetary and credit structure of the country.

Despite such grave and obvious dangers to large "make-work" federal expenditures, the opinion prevails that the electorate has been "conditioned" to the acceptance of Uncle Sam as a job-maker; and that they would choose that expedient in preference to suffering large-scale unemployment. The only likely alternative to the foregoing (so goes the argument) is for private enterprise to prepare the largest possible "reservoir" of jobs in advance of the war's end—and, by this means, forestall public consent to the government's embarking on large-scale deficit-socialism. To provide leadership in this important undertaking is the task of the Committee for Economic Development, and in the above-named pamphlet it tells what its job is, and the help this project needs from everybody in a responsible position in business or industry. This information is, thus, something with which every intelligent person of non-socialist leanings, in his own interest, needs to be familiar.

The pamphlet points out that in 1940—the last full year of peace—46.6 million people were gainfully employed, less than a million of them in war work and in the armed services. By the end of 1943, 71 millions will be employed—29 million of them either in the armed services or on war work. When the war ends, industry will have to find jobs at peacetime work for about 27 million more people than are now so employed. This means that factories doing war work will have to shift to peacetime products to keep most of their present employees working—and that 7 million more jobs will have to be found for returning service men.

To accomplish this task—and thus forestall socialist totalitarianism—the Committee is endeavoring to enlist each industrial company in a program of surveying its post-war market and production possibilities, to the end that, at the war's finish, no period of recession and "waiting to see" will be necessary. A

number of large companies have already made surveys of this kind—and information and assistance is available from the Committee for others who may wish to do the same. The booklet gives a brief bibliography of practical literature available for the guidance of managements who are concerned at what their post-war prospects are likely to be.

The Chamber of Commerce of the United States has issued several instructive bulletins entitled "Post-War Readjustments." Bulletin No. 1 in this series, for instance, discusses the question: "Why plan for the post-war period?" The author is Dr. E. P. Schmidt, economist for the Chamber's committee on economic policy, and there is a short foreword by E. V. O'Daniel, chairman of that committee (who, as vice-president of one of the nation's largest chemical concerns, is himself a practical economist of great understanding). This booklet takes the hot air out of the discussion on "planning" and gets right down to earth, showing why, if business people who can do this job don't do it—it is sure to be attempted by bureaucrats who can't; with unhappy prospects for private enterprise and political freedom.

"Collapse or Boom at the End of the War" is a Brookings Institution (Washington, D. C.) pamphlet (price 25 cents) by Harold G. Moulton and Karl Schlotterbeck. It reminds us of economic developments at the end of previous wars (1812, Civil and World War I) and then examines the peculiar conditions of the present war which are likely to produce similar or different conditions. Dr. Moulton is one of the nation's deservedly best-known economists, and his conclusions here, as usual, go right to the heart of the problem, are logical and are stated clearly.

The National Bureau of Economic Research, 1819 Broadway, New York, has issued several pamphlets which are helpful in understanding the economic changes which war is producing, and what future developments are likely to be. One such publication, by the eminent authority, Professor Wesley C. Mitchell, is entitled "Wartime 'Prosperity' and the Future" (price 35 cents). It reviews—by generalization and specific instances—the more important economic changes which the war has occasioned in our economic life. It compares the effects on specific industries in World War II with World War I, and then discusses the conditions which, most likely, will bear on what happens to the nation economically at the war's close.

The proposals which the government "planners" are preparing are reviewed realistically, but it is suggested that, before long, the people may be somewhat too weary of governmental controls to wish to perpetuate them indefinitely. On the other hand, a word of caution is directed at those who are limning a roseate picture of the post-bellum prosperity it may be possible for us to achieve under private enterprise. The difficulties in the way of such a fortunate outcome are many, and success in this direction will not likely be attained if these difficulties are glossed over in amateurish enthusiasm and, hence, are not attacked with sufficient candor and understanding. Recollection that some of the most conspicuous cheer-leading for private enterprise is now being done by highway enthusiasts, who belie their professed principles by demanding that 3 billions annually be spent on roads in the immediate post-war years, is just one of the instances which could be cited to show that Dr. Mitchell's misgivings are justifiable.

Effects of "Featherbed" Rules on Toledo, Peoria & Western

Reports to Interstate Commerce Commission show reductions in output of service and traffic per employee in train, engine and yard service in 1942 compared with 1941

THERE has been a long controversy regarding the effects of "featherbed" rules on the number of men the railways have to employ, and on the consequent operating costs they have to incur, to render any given amount of service. The issue of "featherbedding" was squarely raised between George P. McNear, Jr., president of the Toledo, Peoria & Western, and the train service brotherhoods in 1941. The controversy resulted in a strike. The strike resulted in adoption of government operation of the T. P. & W. beginning in April, 1942. Its operation has since been conducted by the Office of Defense Transportation, which first appointed John W. Barriger III as federal manager, and later appointed Holly Stover to succeed him.

The Director of Defense Transportation, Joseph B. Eastman, on July 1, 1942, announced the establishment of schedules, wages and working rules that "are in consonance with those generally prevailing upon the railroads of the country." There has since been controversy regarding the comparative operating results secured by Mr. McNear during the period prior to December, 1941, under the rules he then had in effect, and the operating results secured by ODT since April 1, 1942, and especially under the rules in effect since July 1, 1942. Mr. McNear made a statement of his position on this matter to the House Military Affairs Committee last week, as is reported in the news pages in this issue.

The *Railway Age* had copied from the records of the Interstate Commerce Commission data reported to it

for the eight months April-November, 1941, inclusive, when the T. P. & W. was being operated by Mr. McNear, and for the eight months April-November, 1942, inclusive, during which it was operated by ODT. These data show the numbers of employees in engine, train and yard service, and also gross ton-miles and net ton-miles of freight service, in each month of the two periods. Computations based on them show gross ton-miles and net ton-miles *per employee* monthly. The data were selected and computations made for one purpose—viz., to ascertain whether they would show differences in operating results under the rules that Mr. McNear had in effect in April-November, 1941, inclusive, and the rules in effect under ODT operation in July-November, 1942, inclusive. The data from the records of the Commission, and the results of computation based upon them, are given in an accompanying table.

Wage Increase Must Be Allowed For

In comparing the "train, engine and yard cost data" allowance must be made for the fact that basic wages were higher in April-November, inclusive, 1942, than in April-November, inclusive, 1941, because of general advances in wages on all railways which became partly effective in September, October and November, 1941, and were in full effect throughout 1942.

Mr. McNear acquired the T. P. & W. at foreclosure sale in 1926, when it was threatened with abandonment,

Toledo, Peoria & Western Oper-

	April		May		June		July	
	1941	1942	1941	1942	1941	1942	1941	1942
Number of Employees (Mid-month count)								
Train and engine service.....	62	60	58	86	62	82	67	108
Yardmasters, switch tenders and hostlers	9	6	9	8	10	9	9	8
Total train, engine and yard.....	71	66	67	94	72	91	76	116
Performance Data								
Freight train-miles:								
Total	33,221	33,208	33,783	39,425	34,045	36,199	35,235	26,516
Per employee in train and engine service.....	535	553	582	458	549	441	526	338
Per employee in train, engine and yard service.....	468	503	504	419	473	398	464	315
Gross Ton-Miles, excl. loco. & tender (thousands):								
Total	44,338	39,928	48,568	61,743	46,854	54,764	52,023	57,385
Per employee in train and engine service.....	715	665	837	718	756	668	776	541
Per employee in train, engine and yard service.....	624	605	725	657	651	602	685	503
Net Ton-Miles (thousands):								
Total	18,321	17,920	20,639	26,204	19,493	24,770	20,923	27,589
Per employee in train and engine service.....	296	299	356	305	314	302	312	255
Per employee in train, engine and yard service.....	258	272	308	279	271	272	275	238
Train, Engine & Yard Wage-Cost Data								
Compensation—Train and engine service employees.....	\$14,562	\$14,449	\$15,254	\$19,788	\$15,425	\$18,150	\$19,392	\$24,534
Compensation—Yardmasters, switch tenders & hostlers	1,113	1,008	1,261	1,157	1,252	1,230	1,492	1,654
Total compensation—Train, engine and yard employees.....	15,675	15,457	16,515	20,945	16,677	19,380	20,884	26,188
Averages—Train & Engine Service:								
Cents per train-mile.....	44	44	45	50	45	50	55	67
Cents per 1,000 gross ton-miles.....	33	36	31	32	33	33	37	42
Cents per 1,000 net ton-miles.....	79	81	74	76	79	73	93	89
Averages—Train, Engine & Yard:								
Cents per train-mile.....	47	47	49	53	49	54	59	72
Cents per 1,000 gross ton-miles.....	35	39	34	34	36	35	40	45
Cents per 1,000 net ton-miles.....	86	86	80	80	86	78	100	95
Gross ton-miles per train-mile.....	1,338	1,209	1,445	1,585	1,381	1,521	1,480	1,603
Gross ton-miles per train-hour.....	26,035	23,838	28,353	30,001	27,464	30,629	27,025	30,488
Net ton-miles per train-mile.....	553	543	614	673	575	688	595	757
Net ton-miles per mile of road per day.....	2,555	2,499	2,786	3,537	2,719	3,455	2,824	3,724



and soon afterward became president. Its gross earnings per mile of road increased from \$4,868 in 1926 to \$9,139 in 1929; and a deficit per mile of \$955 in 1925 and \$300 in 1926 was converted into net operating income per mile of \$1,500 in 1929. Throughout the depression its gross earnings remained larger than before Mr. McNear acquired it, and it made net operating income in each year. In 1941 its gross earnings were \$11,440 per mile and its net operating income \$1,915 per mile.

Throughout this period Mr. McNear succeeded in applying operating rules different, especially in train, engine and yard service, from those generally prevailing on Class I railways—rules avoiding “featherbedding,” or at least including much less of it. He became involved in a controversy over these rules with the Brotherhood of Railroad Trainmen and the Brotherhood of Locomotive Firemen and Enginemen late in 1940. Direct negotiations were terminated early in 1941, when the brotherhoods refused to alter their demands for changes in rules. The brotherhoods called in a mediator from the National Mediation Board, and conferences were held until the fall of 1941.

Mr. McNear then suggested to the National Mediation Board the appointment of an impartial commission to consider the controversy and report its findings and recommendations. The Mediation Board rejected this proposal, and on November 21 advised the parties that in its judgment “all practical methods provided in the Railway Labor Act for our adjusting the dispute have been exhausted, without effecting a settlement.” On November 29 the brotherhoods circulated a strike ballot and on December 6 ordered a strike. Mr. McNear urged the National Mediation Board to recommend to President Roosevelt the appointment of an emergency board under the Railway Labor Act. Instead, the board demanded that the T. P. & W. agree to arbitrate under the Railway Labor Act. Mr. McNear declined arbitration under the Railway Labor Act—as he had a legal right to do, and as, in fact, it had been declined by all the railway labor unions in their wage controversy with all the large railways only a short time before.

On December 21 employees in train and engine service were notified that new schedules of rates and rules which had previously been submitted by Mr. McNear would be

put in effect on December 29; and on December 28 approximately one hundred employees in train and engine service went out in strike. The remaining five hundred employees in other classes of service remained at work.

On February 27 the controversy was considered at a hearing of the War Labor Board, which ordered arbitration under the Railway Labor Act, which the railway management declined. On March 21, 1942, President Roosevelt issued an executive order directing the seizure of the railway and its subsequent operation by the Director of the Office of Defense Transportation.

The accompanying table omits data for the period December, 1941, to March, 1942, inclusive, because there was constant trouble during this period, and strike conditions during the last three months of it. Mr. McNear had new rules in effect in January, February and March, 1942, but, because of the strike, their effects were not adequately tested.

T. P. & W. Performance per Employee Declined

Like other railways, the Toledo, Peoria & Western had much more traffic in 1942 than in 1941; and probably if it had been under the same management throughout both years it would, like other railways, have had more train, engine and yard employees in 1942 than in 1941. The increase in the number of employees in 1942 undoubtedly does, nevertheless, throw some light on the difference in effects produced by the rules that Mr. McNear had in effect in 1941, and those that ODT had in effect in 1942.

The most significant figures in the table, however, are those giving “performance data.” Comparison of these data with corresponding data for the Class I railways shows that output per employee on the T. P. & W. declined in most of the eight months of 1942, whereas on Class I railways as a whole it increased in every month. On the T. P. & W. gross ton-miles per employee in train and engine service declined in every month, whereas on Class I railways gross ton-miles per employee in such service increased in every month from 5 to 23 per cent. On the T. P. & W. net ton-miles per employee increased in two months and declined in five months,—May, June,

Operating Results in 1941 and 1942

	August		September		October		November		
	1941	1942	1941	1942	1941	1942	1941	1942	
1942									
108	67	104	66	105	79	110	70	101	Number of Employees (Mid-month count)
8	9	12	8	11	9	11	8	13	.....Train and engine service
116	76	116	74	116	88	121	78	114	.....Yardmasters, switch tenders and hostlers
									.....Total train, engine and yard
									Performance Data
									Freight train-miles:
									.....Total
26,516	35,974	37,030	34,971	35,580	39,398	41,300	36,292	36,962	.....Per employee in train and engine service
338	537	356	530	339	499	375	518	366	.....Per employee in train, engine and yard service
315	473	319	473	307	448	341	465	324	Gross Ton-Miles, excl. loco. & tender (thousands):
									.....Total
57,385	54,016	64,048	52,044	60,063	56,463	74,650	53,174	64,715	.....Per employee in train and engine service
541	806	616	789	572	715	679	760	641	.....Per employee in train, engine and yard service
503	711	552	703	518	642	617	682	568	Net Ton-Miles (thousands):
									.....Total
27,589	23,202	30,757	22,736	28,206	24,155	36,311	21,803	31,419	.....Per employee in train and engine service
255	346	296	344	269	306	330	311	311	.....Per employee in train, engine and yard service
238	305	265	307	243	274	300	280	276	Train, Engine & Yard Wage-Cost Data
									.....Compensation—Train and engine service employees
24,534	\$19,342	\$25,733	\$21,268	\$24,524	\$19,224	\$29,715	\$18,494	\$26,565	.....Compensation—Yardmasters, switch tenders & hostlers
1,654	1,274	2,255	1,725	2,369	1,252	2,417	1,224	2,359	.....Total compensation—Train, engine and yard employees
26,188	18,616	27,988	22,993	26,893	20,476	32,132	19,718	28,924	Averages—Train & Engine Service:
									.....Cents per train-mile
67	48	69	61	69	49	72	51	72	.....Cents per 1,000 gross ton-miles
42	32	40	41	41	34	40	35	41	.....Cents per 1,000 net ton-miles
89	75	84	94	87	80	82	85	85	Averages—Train, Engine & Yard:
									.....Cents per train-mile
72	52	76	66	76	52	78	54	78	.....Cents per 1,000 gross ton-miles
45	34	44	44	45	36	43	37	45	.....Cents per 1,000 net ton-miles
95	80	91	101	95	85	88	90	92	Gross ton-miles per train-mile
1,603	1,505	1,754	1,490	1,699	1,436	1,825	1,466	1,766	Gross ton-miles per train-hour
0,488	29,876	32,947	28,564	32,821	27,529	34,640	27,255	33,341	Net ton-miles per train-mile
757	647	842	651	798	614	888	601	858	Net ton-miles per mile of road per day
3,724	3,132	4,151	3,171	3,934	3,260	4,901	3,041	4,382	

July, August, and September. On the Class I railways net ton-miles per employee increased in every month from 10 to 39 per cent.

It is difficult to make satisfactory comparisons including yard employees because on the T. P. & W. there is virtually no passenger service for yard employees to render. However, when the yard employees are included, the figures show a similar trend. There were declines on the T. P. & W. in gross ton-miles per employee in train, engine and yard service in every month and declines in net ton-miles per employee in five out of eight months—including July, August, September and November. On the Class I railways, gross ton-miles per employee in train, engine and yard service increased in every month from 2 per cent to 17 per cent, and net ton-miles from 13 per cent to 41 per cent.

As already stated, allowance must be made for the fact that basic wages were higher in 1942 than in 1941. Never-

theless, the fact cannot be disregarded that the reductions in output per employee on the T. P. & W. did enhance the tendency of the advances in wages to increase its labor costs per unit of service rendered and per unit of traffic handled.

Labor costs per freight train-mile in train and engine service increased in seven out of eight months; per 1,000 gross ton-miles, in six out of eight months; and per 1,000 net ton-miles declined in three months and increased in four,—April, May, August and October. Labor costs per train-mile in train, engine and yard service increased in seven out of eight months; per 1,000 gross ton-miles in six out of eight months — including every month after June; and per 1,000 net ton-miles declined in three months and increased in three—August, October and November.

The principal controversy is about the effects of the changes in rules on results of operation; and, as regards that, the record can speak for itself.

Wood Preservers Hold Meeting

Consider committee report and transact routine business—No address or special subjects presented

MEEETING under conditions that forbade a full-time convention, approximately 125 railway men and others interested in the preservation and use of wood, assembled at Chicago, on April 27, for a one-day session of the thirty-ninth annual meeting of the American Wood-Preservers' Association. Originally planned to be held at Cincinnati, Ohio, the arrangement was changed and the meeting held at Chicago to give opportunity to the largest number of members and guests to attend with the minimum amount of travel, this decision being based on the request of the ODT to lighten the burden of transportation. Only committee reports and the most essential items of business were considered.

Both sessions of the meeting were presided over by W. F. Conyers, Jr., vice-president and treasurer, Taylor-Colquitt Co., Spartanburg, S. C., as president. In his review of the work of the association during a year under war conditions, he said that while much of the work of the wood-preserving industry is difficult to evaluate in specific terms at this time, both the industry and the association have made substantial contributions to winning the war.

Despite the drains that have been made by military requirements, death and other causes, the membership was increased by 14 during the year, and 12 members were transferred to life memberships, and 10 were taken by death.

He also mentioned the extent to which treated wood has been accepted as a permanent material of construction, partly owing to the shortage of metals for ordinary uses. He cautioned, however, that, because of the expanded facilities for the production of metals, both they and synthetic materials will give treated wood the keenest kind of competition in the post-war period.

At the closing session, the following officers were elected: President, R. H. Colley, engineer, Bell Telephone Laboratories, New York; first vice-president, Walter P.



Arnold, technical director, Wood Preserving division, Koppers Company, Orrville, Ohio; second vice-president, S. D. Hicks, vice-president, Southern Wood Preserving Co., Pittsburgh, Pa.; treasurer, re-elected, Horace L. Dawson; members of the Executive committee, J. S. Giddings, inspector, treating department, Atchison, Topeka & Santa Fe, Topeka, Kan.; and G. B. McGough, superintendent, Bond Brothers, Louisville, Ky.

The association adopted an amendment to the by-laws providing that future annual meetings shall be held on the fourth Tuesday in April, instead of January, as heretofore.

Departing from the position which it has maintained so



consistently for many years, the association, in recognition of the widespread use of other preservatives, last year instructed the Committee on Preservatives to "present standards (specifications) for preservatives in actual commercial use, other than those covered by present standards." In line with this instruction, the committee, of which J. S. Giddings, inspector, A. T. & S. F., is chairman, presented specifications for chromated zinc chloride, Tanalith and zinc meta arsenite. Two other specifications were also presented, one covering methods of analysis for salt preservatives and the other covering methods for determining the penetration of salt preservatives.

Another section of the report contained a tabulation of piles in trestles built by the Southern Pacific from 1912 to 1917, during which period low-residue creosotes were used for treating the piles, and from 1918 to 1921, when the piles were treated with high-residue creosotes. It was shown that of the 2,343 piles included in the first group, 425, or 18 per cent, had been renewed to 1942. The average life of the failed piles was 23.51 years and of the 1,918 piles remaining in service, 28.47 years. In the high-residue group, 789 piles were driven; 57, or 7 per cent, had failed; and 732 remained in service at the end of 1942. The average service life of the failed piles in this group was 16 years, and of those still in service, 22.76 years.

Specifications

For many years, one of the important tasks that the association has set for itself has been the development and perfection of specifications for the treatment of various species of timber. In pursuit of this objective, last year a committee presented for adoption as a tentative standard, a specification for the pressure treatment of southern pine ties and lumber. The committee recommended this year the addition of a permissive provision for steam cleaning the timbers after the completion of treatment, but before they are removed from the retort; and a requirement that increment borings for inspection of penetration must be made at approximately the center of tangential surfaces of 20 pieces from each charge, including some from each tram.

Another committee which has been studying the possibility of treating intermountain fir and western hemlock in accordance with the specifications for treating Douglas fir, reported that further study of this subject will be necessary, and recommended a change in the personnel of the committee to include those who have practical knowledge of the treatment of these species.

Making its fifth progress report under an instruction to prepare specifications for the pressure treatment of oak ties and lumber, a committee, of which J. E. Mausteller, chief tie and timber inspector, S. A. L. was chairman,

presented in 1941 and 1942, respectively, recommendations on the minimum penetration for red oak and white oak, and this year, made recommendations for minimum retentions of preservatives by these species, in accordance with the accompanying table.

Continuing its consideration of the treatment of southern pine piles by pressure processes, a committee which has previously presented a specification which was adopted as a tentative standard, recommended that the specification be continued in its tentative status for the present. It reported that a preliminary analysis of data which it has gathered on many thousands of piles treated at widely separated plants showed such wide variations in results that the need for further study of the whole subject was indicated.

Pressure treatment of red cedar poles has been under consideration for some time, and this year the committee having charge of the studies presented a complete specification for adoption as a tentative standard. In its report the committee stated that while poles of this species have been given full-length pressure treatment for a number of years, the majority of such poles have received only a non-pressure butt treatment, and that the additional protection afforded by pressure treatment is particularly desirable for poles with relatively thick sapwood, that are set in areas where climatic conditions favor decay. In this connection, a committee studying the treatment of poles by non-pressure processes reported that, while some progress had been made in the evaluation of the several methods of treatment now under consideration, more data on these methods should be obtained and more methods of treatment should be included in the study before safe conclusions can be drawn as to the relative merits of the various treatments.

One of the important items involved in the treatment of wood is a determination of the cubic contents of any charge so that the retention of preservative per unit of volume can be determined accurately. In the case of piles, poles and other round timbers of varying diameter a number of different systems for making this determination have grown up. The Committee on Inspection reported that a study of 2,383 southern pine, Douglas fir and oak piles from various sections of the country, and of 778 Norway and lodgepole-pine ties gave widely varying results. Taking the sum of the volumes of a series of truncated cones as the true volume and calling it 100 per cent, the six other methods of measurement studied gave results ranging from 122.1 per cent to as low as 89.1 per cent. This study is to be continued.

This committee also submitted a new definition of treatment to refusal, as follows:

Material shall be construed as treated to refusal when, the temperature and pressure being constant or increasing within a range consistent with good practice on the material being treated, the absorption in Douglas fir and upland oak, in each of any two consecutive half-hourly periods is not more than two per cent of the quantity already injected. In all other species, when the absorption in any half-hourly period is not more than one-half of one per cent of the quantity already injected.

Recommended Minimum Retentions of Preservative for Red Oak and White Oak Ties and Lumber

	Zinc chloride lb.	Creosote and creosote-coal tar mixtures lb.	Creosote and creosote-coal tar mixtures (In coastal waters) lb.
Red oak			
Lumber 4 in. or less in thickness	0.75*	7	Refusal, minimum 10
Timber and Ties 4 to 8 in. in thickness	0.75*	6	Refusal, minimum 10
Timber over 8 in. in thickness	0.75*	6	Refusal, minimum 10
White oak			
Lumber 4 in. or less in thickness	0.50*	Refusal	Refusal
Timber and Ties 4 to 8 in. in thickness	0.50*	Refusal	Refusal
Timber over 8 in. in thickness	0.50*	Refusal	Refusal

* When used in contact with the soil a 50 per cent increase is required.

Service Records

From the beginning, the association has recognized the value of knowledge of the actual performance of treated timber and has given large consideration to service records. The Committee on Tie Service Records, of which W. J. Burton, assistant to chief engineer, Missouri Pacific, is chairman, presented reports on ties placed in test sections in tracks of the C. M. St. P. & P. and the C. B. & Q. These tests, in which a wide variety of timber given

various forms of treatment have been under observation for periods ranging from 15 to 32 years, are yielding data as to service life that are of high value.

In the Milwaukee tests, the life of untreated ties ranged from 6.4 years for untreated maple to 13.3 years for untreated Douglas fir; while the life of the treated ties ranged from 13.4 years for chestnut treated with zinc chloride to an estimated life of 47 years for maple treated with semirefined paraffin oil, for red oak given the same treatment and for red oak treated by the Card process. In addition, so few of the red oak ties treated with creosote by both the full-cell and the Rueping processes and inserted in 1911 have failed, that no estimate of their probable life can yet be made.

In the Burlington tests, which included 24,874 ties of 20 species, which were inserted in 1909 and 1910, only a few of the creosoted ties remain in service, the estimated average life being slightly more than 29 years.

The actual life of untreated ties in these tests averaged 5.4 years, while those treated by the Card and Burnett processes gave average service of 19 and 16 years respectively.

The Committee on Marine Piling Service Records, of which A. S. Daniels, superintendent of the Texas & New Orleans railroad's Wood Preservation Plant was chairman, presented detailed data regarding docks, piers and other structures of the Southern Pacific in San Francisco bay. Data were also given on the performance record of 13,869 creosoted Douglas fir piles driven in four wharves by the Northern Pacific, in Seattle harbor. The report also included information concerning the performance of a considerable number of piles treated by the mineralized-cell process, an adaptation of the Boucherie process developed in France about 1840, and placed in highway structures in Washington and Oregon, in waters infested by marine borers.

Data presented by the Committee on Post Service Records covered tests that have not been reported recently and included such preservatives as borax, borax-boric acid, chlorinated phenols, as well as chromated zinc chloride and creosote.

Another committee, of which H. A. Haenseler, Western Union Telegraph Company, is chairman, reported on 25 pole-line installations, three of which are on the A. T. & S. F., one is a Postal Telegraph—Cable Company installation and the remainder are public utility lines. Twenty-one of the installations were made with creosoted poles, two lines were given treatment with ZMA, one with

creosote and Montan wax and the poles in the remaining line were untreated. The ages of the lines ranged from 5 to 25 years, the oldest line, located in Wisconsin, containing 625 western red-cedar butt-treated poles, showing a removal of 70 per cent of the original poles, with the remaining 188 poles all showing evidence of decay. In contrast, a line 19 years old containing 1,300 southern-pine-poles, given an empty-cell treatment with creosote, located in Northern Indiana, had 1,272 of the original poles in service in 1942, the other 28 having been removed to accommodate a highway change.

Other Reports

In a report on the Uses of Treated Wood for Car Lumber, a committee of which H. R. Condon, vice-president, Wood Preserving division, Koppers Company, is chairman, gave information with respect to the use of 2,175,000 ft. b.m. of treated wood, including creosoted decking, nailing sills and coal-car sides, and ZMA decking and running boards, by the St. Louis-San Francisco, in 1942. According to the report, the Louisville & Nashville used 554,289 ft. b.m., of which 237,411 ft. b.m. was creosoted gum for decking for flat cars; and the Illinois Central used 650,000 ft. b.m. for 600 stock cars in addition to 160,000 ft. b.m. of creosoted black gum for decking 100 flat cars. Other roads mentioned in the report as having used treated timber in Car Construction included the D. & R. G. W., the Southern, the B. & M., the C. & O., the A. C. L., the A. T. & S. F. and the T. & P. In addition, the report stated that in 1942, the Pullman-Standard Car Manufacturing Co. and the American Car & Foundry Company built a total of 550 steel-frame, 25-ton, narrow-gage, steel-frame, single-sheathed box cars for South American railways.

In its report on the Diversified Uses of Treated Wood, the committee handling this subject, of which the late A. R. Joyce, district sales manager, Wood Preserving division, Koppers Company, was chairman, presented a code of recommended practice for the use of pressure-treated lumber in protecting buildings against decay and subterranean termites. This code provides that all members in contact with the ground must be treated with creosote, with a net retention of not less than 8 lb. per cu. ft. of wood. It also provides for a choice of preservatives for other members not in contact with the ground, but requires pressure treatment with a specified retention for each of the preservatives.

Why Discard the System Which Made America Strong ?

"Many of us are familiar with the type of social worker who is so busy doing good to others that he neglects his own wife and children. That type seems to be appearing also in the domain of international effort. I for one distrust world planners who do not give sufficient thought to the happiness and prosperity of their own countries. There are men—honest, high-minded men—who think they are raising the living standards of the world when they merely succeed in lowering the living standards of America. I contend that we shall be able to weight the post-war scales in favor of peace and prosperity for mankind only if we continue to preserve and strengthen the economic system which gave us that capacity.

"It is more fashionable nowadays to speak the language of philanthropy. But I prefer to speak the language of enlightened self-interest. Winston Churchill has had the courage to tell his own people and the world at large that he

—From an Address by Eric A. Johnston, President U. S. C. of C.

does not intend to preside over the liquidation of the British Empire. Without entering into polemics about the British Empire, one cannot help admiring his realism and his courage.

"It seems to me that we Americans ought to muster enough of the same sort of realism and courage to assert plainly that we do not propose to preside over the liquidation of the American system of life; that we are determined to preserve the free enterprise economy, the superior levels of existence and the unsullied democratic institutions that have given us world leadership. We should not be squeamish about admitting that this is a self-interest approach.

"It is against this background that those of us concerned with preserving peace must watch and judge any tendency to put more and yet more authority into the hands of any government and particularly into the hands of our government."

Letter Chamber of Commerce Asks Budd for copy of proceedings

C. of C. Discusses Transportation

Budd urges need for more materials, especially rails, locomotives and cars, in that order—Shippers and O. D. T. officials ponder present troubles and their remedies

RAILROADS, having been "victims of their own efficiency" in their failure to obtain an equitable share of materials, are now at the point where they need "three things vitally," and the first of them is track rail—with locomotives and cars the runners-up—according to Ralph Budd, president of the Chicago, Burlington & Quincy and former transportation member of the Advisory Commission to the Council of National Defense. Mr. Budd spoke thus at the conference on "Wartime Transportation Problems" held this week in connection with the thirty-first annual meeting of the Chamber of Commerce of the United States at the Waldorf-Astoria Hotel, New York.

Director Joseph B. Eastman of the Office of Defense Transportation agreed with Mr. Budd "entirely on rail," but he went on to point out that continuing short-rations for transport must be expected with an "astounding amount" of materials going into direct war production. Mr. Eastman did say, however, that there would be additional locomotives this year, probably as many as the shops can turn out in view of their conversions to war work.

Allocators Should Heed Voices of Experience

Because he is of the opinion that the advice of men like Mr. Eastman and experienced transport executives "has not been given the heed it should have been" by government agencies which decide on material and manpower allocations, Mr. Budd welcomed President Roosevelt's action of last week, appointing the O. D. T. director to membership on the War Production Board. He hopes there will be a follow-through to action taking the railroads out of the "civilian" class and official recognition of them as "part of the war effort."

Participating in the transportation conference, in addition to Messrs. Budd and Eastman, were other O. D. T. officials, including Henry F. McCarthy, director of the Division of Traffic Movement; Guy A. Richardson, director of the Division of Local Transport, and Richard Stickel, assistant to the director of the Division of Motor Transport; also G. H. Shafer, president of the National Association of Shippers Advisory Boards; R. R. Luddecke, president of the National Industrial Traffic League; Christopher J. Abbott, chairman of the Transportation Association of America, and Walter Mullady, president of the Decatur Cartage Company, Chicago. Arthur M. Hill, president of the Atlantic Greyhound Corporation, presided at the session which took the form of answers by participants to a series of transportation questions which had been submitted in advance.

The session was held on April 28, the same day on which O. D. T. Chairman Eastman had addressed one of the conventions general sessions. There he reviewed the general transportation situation, ranking the intercity passenger travel situation as "the most troublesome and difficult of all transportation problems by which the coun-

try is faced." Nevertheless ODT still fears that travel rationing would be "a cure worse than the disease," something to be regarded only "as a last and desperate resort"; and thus its publicity campaign to promote "voluntary renunciation of unnecessary travel" on the part of the public "will be intensified progressively in coming weeks."

Cooperation Needed in "Don't Travel" Drive

In that connection Mr. Eastman appealed to members of the Chamber for their help in bringing the needs of the situation home to the individual. He reiterated his recent call for the spreading of vacations throughout the year, the avoidance of vacation travel on week-ends or during holiday peaks, and the taking of a go-to-one-place-and-stay vacation.

When the subject came up at the transportation conference, O. D. T. Traffic Director McCarthy said that it was going to be impossible for the common carriers to meet an unrestrained demand for travel in the coming months. O. D. T., he went on, does not think it would be "statesmanlike" for it, a government agency, or for the carriers to proceed on a first-come, first-served basis, closing the doors in the faces of people waiting on the platform after trains and buses are loaded to capacity.

Thus O. D. T. plans to make the facts known to the public; but it hopes to avoid formalized control of travel. At the same time, Mr. McCarthy continued, there will be an effort to make the most effective use of passenger equipment; and that may result in some travelers losing their favorite sleeping-car service—of some communities being deprived of bus or rail service where they now enjoy both.

Commenting on the effectiveness of "don't travel" advertising, Mr. McCarthy recalled how some of that done during the last Christmas season succeeded to the point where there was complaint among rail and bus men that it did its job too well. On this point Mr. Budd suggested that in his opinion the most effective advertising of this type is not that which tells people to keep off trains; but rather that which urges the public to consult the railroads in an effort to plan trips for times when the congestion is not great. When the going gets uncomfortable, Mr. Budd added, the unnecessary trips won't be made.

Would Pull Off D. C.-N. Y. Sleepers

Addressing himself to Mr. McCarthy's suggestion that some sleeping-car services might have to be discontinued in order to shift equipment to more critical areas, the C. B. & Q. president thought the New York-Washington service would be a good place to start curtailing "to see how it works." He pointed out that this is a run

of only about 227 miles where train service is frequent and expeditious. Also Mr. Budd noted that there are still in operation many parlor cars which seat only about half as many persons as coaches. He said that these are being converted as fast as seats can be obtained, and he thought that something might be done to make available the limited amount of material required for seats to make additional conversions. "There," Mr. Budd added, "is a case where an ounce of prevention is worth a pound of cure"; for "just a few seats would go a long way."

Meanwhile the round-table discussion had got under way with comments on the prospects for further diversions of freight to the railroads. Mr. Eastman thought there might be some further diversion of New England coal from the Hampton Roads water route to all-rail routes or rail-water routes through the port of New York, although O. D. T. hopes to avoid it. Also, the late opening of the Great Lakes may increase the diversion to railroads of coal, grain and limestone in order to make as many lake vessels as possible available for the iron-ore movement. Finally, Mr. Eastman anticipates that there may be some diversion to the rails of petroleum traffic moving to Pacific Coast points, and some further shift of traffic from trucks.

Commenting on "outstanding changes in the characteristics of traffic flow," Mr. McCarthy said that, aside from the diversion of long-haul traffic from the sea to rails, there have emerged new areas of production and new destination territories, and complete changes in the direction of traffic flow. These developments, he went on, have caused an impact on terminal facilities with resultant increases in transit time. This situation, Mr. McCarthy emphasized, is not a carrier disability, but the result of wartime demands for transportation.

Shipper Committees Will Keep Up Good Work

Mr. Budd mentioned the East Coast oil movement as the "outstanding diversion" to the rails, while Mr. Shafer referred to the additional cars needed to handle traffic formerly moving through the Panama Canal. And Mr. Luddecke observed that "in view of the enormous amount of traffic, the railroads have done a splendid job." Messrs. Shafer and Luddecke also answered the question which asked what further action by shippers and railroads is necessary to aid programs designed to overcome the effect of war traffic conditions. The former explained the work of the Advisory Boards' 430 car efficiency committees, pledging an intensified effort throughout 1943. Mr. Luddecke suggested that railroad executives should give their traffic officers a free hand in the matter of cooperating with shippers on conservation measures.

Mr. Budd thought every opportunity should be taken to flatten out the traffic curve, such as stockpiling of commodities in addition to coal where "an outstanding job has been done." Mr. McCarthy then took on the "cross-hauling" question—he preferred to call it "haulage conservation"; and he reiterated the previously-expressed O. D. T. view that it is not a simple transportation subject, but one which involves the whole pattern of marketing, distribution, promotion, and sales. Mr. McCarthy is concerned because some people thinking about this subject are "completely overestimating" the possible savings, whereas others whose interests are involved are rationalizing that there is no need to do anything. The O. D. T. traffic director thinks that there are real possibilities for conserving transportation in this direction, and O. D. T. is continuing to work on the problem with W. P. B. industry committees.

Speaking along the same line in his address at the general session, Director Eastman had said that this field of conservation had not yet been intensively developed. "The opportunities for savings, without serious disruption of commerce and industry, can easily be exaggerated, but they do exist in substantial measure," he added.

Mr. Luddecke thought that a "great deal" could be accomplished with the help of W. P. B.; but Mr. Shafer suggested that there has been "too much loose talk" about the subject. He went on to point out that a great many commodities today are allocated, with some agency of the government telling shippers where they can ship and where they cannot ship, a factor which would have to be taken into consideration. Mr. Shafer quarrels with those gentlemen who can look at a map and say "this or that is cross-hauling." At the same time he agrees that unnecessary and wasteful cross-hauling must be eliminated; any other course would be unpatriotic in these times, he said.

Government Should Load Heavily Too

Commenting on the need for changes in methods of government agencies using transportation on a large scale, Mr. Shafer pointed out that O. D. T.'s minimum loading orders have exempted government agencies from their requirements. He nevertheless thinks that the government agencies should cooperate in the heavier-loading effort. He also suggested that the Army might make more efficient use of flat cars, and perhaps get along with fewer such cars. As for routing by government agencies, Mr. Shafer doesn't think it should be influenced by the fact that certain railroads owe money to the government. Mr. Luddecke believes that more efficient use of equipment assigned to government traffic might be achieved if the routing were left in the hands of traffic managers of industries from which the government buys.

The question on land-grant rates asked if they were "still resulting in unduly circuitous routings." Mr. Eastman explained that land-grant rates do not result in circuitous routing in view of the equalization agreements filed by non-land-grant roads. The rate is figured on the land-grant route, which may be circuitous, but the traffic moves over the direct route under the equalization arrangements. The O. D. T. director then went on to express again his view that remaining provisions of the land-grant-rate law should be repealed, because "the government has been adequately compensated for the land grants and is no longer entitled to this preference." The solution, he added, lies with Congress, and "as an amateur in that matter I should hesitate to give you any advice as to how to deal with Congress."

Rail Failures Sufficient "to Cause Concern"

Then came the discussion of the equipment situation wherein Mr. Budd made his plea for rail and rolling stock. The number of rail failures have become sufficient "to cause concern," he said, adding that "to keep the railroads on half-rations on rail much longer is a dangerous thing."

At this point Mr. Budd also told of how the railroad industry prepared for the emergency, cooperating in the organization of the Shippers Advisory Boards and investing \$11,000,000,000 in new facilities. The stand-by plant resulting from that investment "saved the day in this war," he said. Also, he recognized that the regulatory authorities, too, have had an appreciation of the situation. "Foremost," he said, "has been Mr. Eastman, but the Interstate Commerce Commission should not be

overlooked," because its service orders have enabled railroads to do many things they couldn't do themselves.

Discussing proposals to limit rail and truck hauls, Mr. Eastman promised that O. D. T. would "take no arbitrary action," but would act only "in particular situations where action is desirable and practical." He suggested that the principle had been applied "with success" in the case of the O. D. T. order limiting hauls of petroleum products. Mr. Budd endorsed the O. D. T. director's view that "arbitrary action" would be undesirable. He cited the variations in conditions throughout the country, and suggested voluntary arrangements as the better way. Mr. Mullady said that the trucking industry feels about the same way.

In addition to its references to the travel situation and cross-hauling, Mr. Eastman's address at the general session gave some figures on railroad performance, calling them "eloquent proof of the fact that in the present war a very tight curb has been kept on expansion of railroad facilities."

Beating '29 and '20 Peaks on Short Rations

"In 1942," he said, "revenue ton-miles exceeded the 1929 record by 42.6 per cent, and passenger-miles exceeded the 1920 record by 14.6 per cent. In contrast, in 1942 the total tractive capacity of all locomotives was 15.2 per cent less than in 1929 and 7.3 per cent less than in 1920; the total tonnage capacity of freight cars was 16.5 per cent less than in 1929 and 11.3 per cent less than in 1920; and the number of passenger cars was 27.9 per cent less than in 1929 and 30.8 per cent less than in 1920."

The O. D. T. director went on to list ways of getting the most out of transportation equipment by keeping it going, stressing the necessity for keeping rolling stock in repair, relocating equipment from areas of surplus to meet deficits elsewhere, leveling out freight and passenger traffic peaks, utilizing all facilities of all forms of transport, and eliminating "wasteful service," i. e., "service which is convenient and desirable and which we all like to have in normal times, but which is unnecessary in a wartime economy."

The performance of transportation agencies, Mr. Eastman said, "has not been perfect," but he thinks it is an understatement to say it has been "creditabile." He believes that the "major share of the credit should go to the carriers, including their employees, as well as their managements, and to the shippers for the magnificent cooperation which they have given at every turn." At the same time, he sees "no room whatever for complacency," for "we have not reached the peak, so far as movement of either property or persons is concerned."

Then after making his appeal for cooperation in the drive to eliminate unnecessary travel, Mr. Eastman had a final word about the government's obligations to the transportation system. "The tight curb on the expansion of facilities," he said, "can be made so tight that it will do vital harm to the war effort. Transportation is the blood brother of production and modern warfare. They cannot live and thrive without it, and it must be adequate and efficient to meet their needs. This is a point of view which my Office is constantly presenting to the War Production Board, and it is responding, not always to our satisfaction, but in some considerable degree."

The Constitutional Bill of Rights vs. the New Deal Version

The National Resources Planning Board has issued its own "bill of rights"—quite a different list from those set forth in the Federal Constitution. This New Deal "bill" is as follows:

1. The right to work, usefully and creatively through the productive years;
2. The right to fair pay, adequate to command the necessities and amenities of life in exchange for work, ideas, thrift, and other socially valuable service;
3. The right to adequate food, clothing, shelter, and medical care;
4. The right to security, with freedom from fear of old age, want, dependency, sickness, unemployment, and accident;
5. The right to live in a system of free enterprise free from compulsory labor, irresponsible private power, arbitrary public authority, and unregulated monopolies;
6. The right to come and go, to speak or be silent, free from the spyings of secret political police;
7. The right to equality before the law, with equal access to justice in fact;
8. The right to education, for work, for citizenship, and for personal growth and happiness; and
9. The right to rest, recreation, and adventure; the opportunity to enjoy life and take part in an advancing civilization.

The New England Council recently conducted a discussion of this new "bill" and President Henry M. Wriston of Brown University had the following to say:

"The differences between this declaration and the Bill of Rights embodied in various texts—in our State Constitutions and in the first ten amendments of the Federal Constitution—are deeply significant. The latter looked to rights against the state, to freedom from political oppression and officious interference. The new Bill of Rights looks much more to the obligations of the state than to opportunity for the individual. It talks about money, food, clothing, housing, insurance, health. It sets requirements our forefathers would never have suggested, for those were the things which they left to individual initiative; they neither wanted nor would accept state assistance or supervision. The current declaration emphasizes what is to be done for man rather than what he may do even in the face of opposition from

political authorities. It represents the frustrations which come to those who almost achieve some great objective but fall short.

"Its omissions are as eloquent as its professions. Though we live in an age of total war and at a time when more men in proportion to the total population are under arms than ever before in history, there is no sturdy assertion of civilian rights. Strikingly enough, moreover, there is in this new declaration a reference only to equality before the law, not to due process. Nor is there intimation of any right to property except property in a job. It is interesting to observe also that this statement of rights makes no reference to the several States nor to the ultimate authority of the people.

"The early Bill of Rights represented the deep and powerful yearning of men who had lived intimately with tyranny, of men who had known oppression at first hand, of men who were determined to govern political practices thereafter with firm principles. The newer declaration is the product of men who had lived intimately with depression. It is cast in the mode of thought of a materialistic age, a time of pessimism, years of retreat, of minds hesitant and doubtful. It is concerned not so much with principles as with activities. It looks not so much to opportunity through expansion, either extensive or intensive, as to distribution of what appears to be available. It has qualities which reflect transient circumstances rather than the more profound and fundamental determination of our fathers.

"It contains, therefore, neither the profundity of challenge nor the prophetic optimism of the earlier Bill of Rights, the framers of which had a shrewder understanding of the meaning of life; they would never have dreamed of urging a right to adventure which is inherent in life itself; they would have seen the antithesis between adventure and security. . . ."

O. W. I. Reports on Transportation

Government agency finds domestic transport "battle" being won, service "vastly better than in last war"



O. W. I. Photo

Extra Ticket Selling Facilities Are Kept Busy at Washington Union Station

THE Office of War Information released to the press on April 26 a detailed report on the domestic transportation situation. Its avowed purpose is to reveal the whole truth (following the pattern of such earlier O. W. I. reports as those on aircraft and the consumption of alcoholic beverages by the armed services). Special care, it is said, has been exercised not to gloss over unpleasant facts, if any. From a survey of the evidence, O. W. I. concludes that "the battle of transportation in the continental United States is now being won, and the war and necessary civilian transportation load is being carried."

"Victories"—But Not Necessarily Permanent

The report lists the following "victories of the past few months":

Railroad transportation is vastly better than during the last war, when serious freight congestions were widespread. The railroads are moving troops, and they are moving civilians without comforts, with delays, and beyond essential needs. Buses, street cars, passenger cars and even box cars are getting war workers to plants and homes. Refrigerator cars, which used to return empty to the west and south, are carrying back freight. Tank cars are carrying a large part of the oil that, in peace, would have gone by water. "Big Inch," the pipeline from Texas, is crawling eastward and is already delivering 60,000 bbl. of oil a day at Norris City, Ill. Barges, which used to lie idle, are carrying war freight on rivers and canals. Highway trucks, which used to return empty, are moving pay loads. Airplanes are still taking passengers, on priority.

The victories, however, are not necessarily permanent. Our transportation equipment, with few exceptions, is being used close to its limits. Railroad passenger equipment, buses, private automobiles, tires, parts and tank cars are wearing out. Few replacements are being made. The manpower shortage is serious and may get worse. Women and Negroes now hold many transportation jobs in which they have not previously been employed, but discrimination against Negroes persists in many places. Selective Service Boards which defer war plant workers often draft war transportation workers.

Two earlier engagements still remain acute.

1. Transportation of oil.
2. Transportation of workmen to war plants.

The latter is approaching its most acute stage right now. To continue present accomplishments it will be necessary to maintain the recently increased efficiency in railroad operation and to increase group-riding in private passenger cars to prevent further strain on local transportation systems.

It will be noted from the foregoing that the position of the Negro in transportation receives prominent attention in the report. In addition to giving its allegations of discrimination against citizens of color a prominent position in the opening paragraphs of the report, the O. W. I. prepared a special

"handout" for "Negro editors." This document had comparatively little in it about transportation performance, but was mainly given over to statements concerning discrimination against the employment of members of the colored race in transportation, and to instances of long hours of work by dining car crews and sleeping car porters. In preparing its report the O. W. I. states that it consulted the following organizations:

Office of Defense Transportation
War Production Board
Office of Price Administration
National Resources Planning Board
Civil Aeronautics Board
War Training Service
Maritime Commission
War Department
Association of American Railroads
National Association of Motor Bus Operators
American Trucking Association
Dining-Car Employees' Union
Petroleum Administrator for War
Bureau of Public Roads
Solid Fuels Administrator
United Transport Service Employees of America
Brotherhood of Sleeping Car Porters
Inland Waterways Corporation
International Brotherhood of Teamsters & Chauffeurs
War Shipping Administration
Amalgamated Association of Street Electric Railway & Motor Coach Employees of America
"Labor"—A national weekly newspaper owned by fifteen recognized standard railroad labor organizations.
Travel Bureaus, car rental agencies, etc.

"Back to the Trains in a Hurry"

In this issue of *Railway Age*, portions of the report dealing with passenger transportation (and particularly the railroad part thereof), are published practically *in extenso*. In subsequent issues, portions of the report dealing with freight transportation (especially coal and oil) and manpower will be published. The O. W. I. findings regarding passenger transportation follow (sub-headings in some instances being our own, rather than the O. W. I.'s):

When America entered the war in 1917, there were a mere 4,500,000 passenger automobiles in the country and almost no buses. People rode in trains as a matter of course. By 1941, however, when we entered the present conflict, the picture was



O. W. I. Photo

Farm People from West Virginia En Route to Upper New York State to Work in the Harvest

took place on railroads equipped with two-thirds as many passenger cars and half as many locomotives as twenty years before. The heaviest crush took place toward the end of the year: in October railroad travel was up 130 per cent over October, 1941; in November, 143 per cent over the previous November. And millions of these Americans traveling on trains were—and continue to be in ever increasing numbers—Americans in uniform. As a Pullman porter recently put it, "Troop travel is conspicuous."

It cannot be said that travel for pleasure—or, rather, travel to places of pleasure—is out. Plenty of Americans traveled to Florida this last winter in addition to the troops who went there to train. Florida-bound coaches and Pullmans carried honeymooners, service men on furlough, and people going down to visit friends stationed there. But this year fewer people went to Florida—and to Mexico, too—than would have gone had the trains been able to fill all requests for space; and those who did go, though they probably had a good time when they got there, almost certainly didn't enjoy the train trips very much.

American passenger transportation in 1943 is dominated by two great movements: transportation by train to camps, and transportation by bus to war plants.

Troop Travel

The fact that the greatest density of population—and therefore the greatest number of men inducted into the armed forces—are in the Northeast, whereas the most favorable training areas, due to weather conditions, are in the Southeast and Southwest, makes constant troop movement on a huge scale inevitable.

At the present time, about 1,750,000 troops a month, over 50,000 a day, are traveling on America's trains in official troop movements—exclusive of furlough travel. About half the total supply of Pullman cars and 17 per cent of all day coaches (about 3,000) are in troop use. Despite numerous spectacular and conspicuous movements of whole divisions with full equipment, the bulk of troop movements takes place in small groups of 250 men

different. Train travel had declined severely, and with the number of automobiles risen to 29,500,000 and the number of buses to 123,000. America was making enthusiastic use of the country's three million miles of public roads. Then, with a swiftness that echoed the speed of the surprise at Pearl Harbor, the picture changed again. The rubber and gasoline shortage and the training and growth of the armed forces put Americans back on trains in a hurry. In 1942, Americans bought far less gasoline than they had in previous years, and were using their cars cautiously. Over the year, the number of people traveling on trains almost doubled. Only in 1920 did more Americans ever ride on trains than in 1942, and in the earlier year the average trip was considerably shorter.

The 54,000,000,000 passenger-miles traveled by Americans on trains in 1942 was an all-time peak. This great travel crush

Customers Waiting to Board Trains at Washington Union Station

O. W. I. Photo



or less, riding in cars attached to regular passenger trains. Movements involving more than one Pullman or coach (39 men is the number set by Army regulations) are directed from Washington, by the Traffic Control Division of the Office of the Chief of Transportation in the War Department. Smaller movements are directed by the Transportation Officer of the post concerned.

During the last war, the average number of moves made by the American soldier was three; now it is considerably higher. The following is a list of typical moves made by the American soldier of 1943:

- Move 1: to induction center.
- Move 2: (usually after 7-day furlough): to reception center.
- Move 3: to replacement training center for basic training.
- Move 4: to particular branch of the service—quartermaster corps, artillery, cavalry, etc.
- Move 5: to big maneuvers . . .
- Move 6: . . . and back.
- Move 7: to special training area—for desert maneuvers, ski maneuvers, etc.
- Move 8: to point of embarkation.

Some troops may make fewer moves than this, some more. Trained in favorable areas to meet special tactical situations which may turn up overnight in any part of the world, troops have frequently to be sent to particular ports of embarkation, whether or not these ports are near their training grounds. There is a section of the Transportation Corps, Army Service Forces, of the War Department which studies routings to avoid unnecessary transportation of troops; what may look like an example of cross hauling is probably a move of specially trained troops necessitated by developments abroad.

To move, as a unit, a division of 15,000 men with full divisional equipment and armament needs, is a complex procedure, requiring the closest coordination of a number of railroads both for equipment and for routing. To expedite these and the thousands of lesser moves, the offices of the Transportation Corps of the War Department work 24 hours a day, and sharing the offices are a staff of 70 or 80 employees of the Association of American Railroads. The order to move a division is given by the General Staff of the Army to the arm or service involved, who in turn coordinates with the Traffic Control Division of the Office of the Chief of Transportation for schedules and equipment. Overnight travel by a division requires over 1,300 cars: 26 Pullman cars, 330 tourist cars, 82 baggage cars for field kitchens, 9 boxcars and 895 flat cars or gondolas to carry big guns, jeeps, tanks, and other wheeled vehicles, such as ambulances and laundries. (One 16-inch naval gun alone, moved from navy yard to proving ground and to ship, takes up three flat cars.)

Maneuvers a Special Problem

Large movements of this kind, which are of course given priority over all other movements on the rails, cannot help but be disruptive to the schedules of ordinary passenger trains. Lots of them are running late, and the schedules of a number have been lengthened in an effort to maintain "on time" schedules. On long runs, waits on sidings for several hours while troop trains pass are a common occurrence. Large-scale maneuvers in the Southeast and Southwest, including desert maneuvers in the Desert Training Area in Southern California, may require the moving in and out of as many as 300,000 men within a comparatively brief period; such movements may upset regular passenger and freight schedules in the area for weeks at a time. Occasionally it is more practical to hold a troop train while a regularly scheduled passenger train gets out of the way; ordinarily, however, as traveling Americans can testify, it is the troop trains that pass and the others who watch them go by.

If all the requests by the War Department were to be complied with—or, to put it another way, if the War Department insisted on having all the Pullman equipment it could use—all the Pullman cars of the country would be carrying troops. The present allotment is a compromise with essential civilian needs. When Pullman cars are not available, troops occasionally travel overnight in coaches. Two in each lower berth, one in each upper, army troops move at night chiefly in Tourist Pullmans. About a hundred parlor and lounge cars and 150 old sleepers have been rebuilt to hold three tiers of berths, and are used chiefly for moving Navy units.

Troop trains and troop cars attached to passenger trains are patrolled by military police, as in every train in the country on

lines where there is a regular flow of furlough travel. There are military police on about half the trains of the United States at the present time. Drunkenness among men and officers is infrequent indeed in proportion to the immense traffic.

Troops Travel by Rail—Not Trucks

Practically all troops and equipment move by rail. Occasional truck movements are made, involving 100 to 200 vehicles, chiefly small tactical moves from training camps to maneuver areas, and practice moves to test mobility in case of invasion. These convoys are routed through or around cities and across states by police escorts provided by State Highway Traffic Advisory Committees, created by the War Department after the fall of France had shown what road blockage can do. These committees also furnish civilian driver records to the army.

On the roads are also to be found new army trucks of various sizes—from half a ton to ten tons—being driven chiefly by employees of drive-away companies, now under contract to the army, who formerly delivered passenger cars and buses from factory to dealer. The principal movement of this kind is from the Detroit area to points on the Ohio River, whence the trucks are transshipped by water. New trucks are also driven direct to destination. Army trucks for embarkation are boxed at the factory and moved to port by rail. Jeeps are handled largely by the big haulaways which used to move along the highways laden with shiny new cars.

Civilian Railroad Travel

Despite the wartime strain of troop movements, the railroads also are accomplishing the transportation of vastly increased numbers of civilian travelers, who are arriving at their destinations usually weary, almost always late, and with plenty to say—though seldom grumblingly—about crowding and delays.

As passenger traffic increased steadily in the latter half of 1942, the railroads, buses and the Office of Defense Transportation began to be concerned about holiday travel in December, especially in view of expected furlough travel. A survey conducted in terminals in a hundred cities showed approximately 25 per cent of inter-city traffic to be non-essential, and a "Don't Travel" campaign was thereupon set in motion with the assistance of the Office of War Information. After-Christmas reports showed the campaign to have been successful in allowing the carriers to get through the season. Two railroads, in fact, complained that it had been too successful—that their holiday traffic had been below capacity—and only one road reported passengers left on station platforms because of lack of standing room in trains. Apologetic holiday travelers gave train conductors elaborate explanations as to the urgency of their journeys, and numerous inquiries were heard from the stay-at-home public as to "when we'll be allowed to travel again." Railroad passenger travel, which in November had increased by 143 per cent over November, 1941, showed in December less of an increase—107 per cent—over the same month of the previous year. The campaign had reversed the usual November-December ratio.

The "Don't Travel" campaign is still in progress. Unnecessary conventions, trade shows, and similar meetings, are discouraged, as well as baseball, football, and racing schedules which involve traveling. Many a professional and commercial or industrial organization writes to the Office of Defense Transportation, asking advice as to whether meetings and conventions should be cancelled. The answer is almost invariably yes. Trade shows, which involve movements of freight as well as of passengers, are particularly discouraged. Some conventions are skeletonized, with attendance restricted and social features omitted. Others are conducted by mail, with speeches and other literature being mailed to those who would have normally attended in person. This spring the baseball clubs trained near home. Football games have followed the example set last fall by the Army-Navy game (unattended by the West Point cadets), for which tickets were sold only in the Annapolis area; and a similar scheme is to be followed by the Kentucky Derby. Any state and county fairs held this year will be smaller than usual.

Civilian Americans who have to use the railroads for business trips, or who, ignorant of conditions on the trains, embark on trips which they fondly expect to enjoy, usually do not find the

experience too comfortable. In addition to the recurrent delays while troop trains pass, other conditions exist to take the joy out of travel. Built for a freight movement that has been primarily eastbound, the transcontinental lines are now for the first time in their history carrying vast quantities of parts and raw materials westward—to aircraft factories and shipyards, to say nothing of subsistence, material and men for the war in the Pacific. In consequence, train delays are particularly frequent in the West, where there are many single track lines, as well as in the maneuver areas elsewhere.

With a large portion of the railroads' none-too-great passenger equipment given over to the armed forces, space for civilians is at a premium. Passenger train schedules were frozen last September, and special extra sections may be run only when permitted by the ODT; there is no construction whatever of new passenger equipment; nor will there be any for the duration; seats in lounge cars are rented like parlor car seats; from the suburbs of Baltimore and Pittsburgh some war workers ride to their plants on wooden benches installed in box cars.

A civilian traveling by coach is likely to find that service men on furlough are allowed to enter the cars before him. He can get a seat if there are any left. There is no official priority system here, but it is a practice followed by many of the railroads. "Give your seat to a serviceman" was one of the lines used in the "Don't Travel" campaign last Christmas, and it seems to have stuck. In Pullmans, reservations are hard to get and berths are frequently sold for double occupancy. Long lines form for meals. Because of the inroads of selective service, many of the trained dining-car employees have disappeared, and untrained substitutes replace them. Working long hours, on some days from 5:30 in the morning to 1 or 2 the next morning, they serve continuously. Formerly, if there were more than 100 persons on a train to be served, a second diner was added; now a single dining-car crew of ten to thirteen men may serve as many as 700 meals a day, with scarcely any let-up between what were once meal periods. This shortage of trained dining-car help is far from being the only or most serious manpower shortage on the railroads, but it is the one that many travelers are most conscious of as they stand waiting for places at the table.

Sleeping car porters are worn down by the great amounts of baggage they have to handle, by the constant making-up and breaking-down of berths necessitated by the usually more than complete "top and bottom loads," and by the lack of adequate rest between and during runs. With their traditional "upper one" now almost always sold to travelers, they sleep instead on settees or sofas in the smoking cars. They are under orders to be particularly helpful to the large number of Americans now riding Pullman for the first time in their lives, and who have to be initiated into the mysteries of sleeping-car travel. One thing that many new Pullman travelers don't seem to know is the fact that tipping is customary. "We do our best to enlighten them on this point," one sleeping car porter said. "Tactfully, of course; we don't want to embarrass anybody. Sometimes what we say gets across and sometimes it doesn't."

Alcoholic Refreshments Hard to Get

Even in states without local options, liquor is often hard to obtain on trains. Most railroads have a 10 p. m. curfew, serving no liquor whatever after that hour, and most will not serve drinks without food in diners. On many trains, particularly in the West, bars are frequently shut down at any time, at the discretion of the steward, if he considers the size of the crowd warrants it—and he often does. "I remember getting a drink on a train once—some place in Southern California," a recently returned traveler said. "It stands out in my memory." More than one railroad, particularly those serving populous camp areas, serve neither liquor nor set-ups. Smoking has become prevalent in non-smoking coaches and in parlor and sleeping cars.

Such are the joys of railroad travel in 1943. It isn't fun, but considerably more than essential travel needs are being taken care of.

In addition to the armed forces, there is one other group whose movements are given preference over ordinary passenger travel. These are the agricultural workers who are to be moved about the country during the remainder of 1943 to help with harvests. Workers in the Mississippi Valley, for example, after the short-staple cotton picking season is over, will move south-

west to pick long-staple cotton; farmers in the Appalachian hill section, after their crops are in, will move to New York, New Jersey and Connecticut for the fruit and vegetable harvests. The Farm Security Administration of the Department of Agriculture arranged for the transportation of these people with the Association of American Railroads and pays for their travel and for their subsistence en route.

Local Transportation

It is in the field of local transportation—getting American workers to and from their jobs every day—that the most serious wartime passenger transportation situation exists. Due to the rubber and gasoline shortages, the rapid obsolescence of vehicles that run on rubber, the lack of new equipment, and widespread difficulty in finding parts, local transportation systems, especially in communities with war plants, are being heavily overtaxed. No system of priorities with respect to the use of local transportation facilities is contemplated, and avoidance of this step is urgently desired; but it is well known that local transportation inadequacies play their part in increasing absenteeism.

Inter-city buses, which had taken so much passenger traffic from the railroads before the war, are now crowded like all other public vehicles. In 1942 they carried 635,928,703 passengers as contrasted with 376,833,000 in 1941—an increase of 80 per cent.

Competing lines are now operating with pooled services and on staggered schedules. New inter-city buses are restricted to a monthly mileage of 6,000. Last July inter-city bus routes were frozen: service cannot be extended to any new points without an ODT permit.

Improved Home Routing

By W. M. Foster*

NOW when much effort is being put forth by the Car Service Division of the Association of American Railroads to curtail circuitous routing—thereby making equipment available for loading sooner, plus the saving in per diem and many empty car-miles to individual lines by short-routing—the thought occurs that much could be accomplished in short-routing foreign empty freight cars on all lines, if a universal change in home cards were put in force, so that the home route card would show not only the line from which car was received, but also the entire home route beyond line from which received, back to the date and junction by which the car originally moved off its home rails.

The following is the general present practice of most roads: Upon receipt of a foreign car from a connection, a home route card is made for the car showing initial, number, road received from, interchange point at which received, date received and agent or other designated person's name or initials—to indicate who made the card. Some railroads include spaces for billing of the car when empty.

Such information places the home route of the car only as far as that individual road's connection from which the car was received, but no further. To be of the most general benefit, the home route should go beyond that first connection—in fact it should go to the second, third, fourth, and all the way back to the original junction and date when car first left its home rails.

This can be done—with perhaps much less clerical time and expense than is necessary with present methods—and at the same time have added information for shortest routing available to each and every person on any

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line who may have the car and home route card in his possession.

This method of handling would include sending home route cards with cars when delivered to connections in switch movements as well as when delivered to connections for line haul—in other words, have the home route card always in possession of the road which has the car.

To accomplish this, let the Car Service Division, A. A. R., establish a universal home route card that would be identical for all lines' use. The only difference to such cards of other lines would be the name of the home or issuing line's name printed across the top of the route card, after which the balance of card would be the same for all railroads, with spaces for initial, number, etc., and the remainder of the card, front and back, provided with blank squares of a size suitable to take impressions from junction stamps, such stamps being about the same size and form throughout the country.

The average-size home route card would accommodate approximately sixteen of such blank squares, front and back, and supplementary cards having only blank squares on both front and back could be added to any original card that may have all squares filled—merely by stapling or pinning it to the original. Such home route card would be made by the home line for its system cars sent to any connection, loaded or empty, even if only for a switching movement to the connection. The home route card should preferably be made by the billing agent at the time when the regular waybill or switch bill is made for a car moving off-line loaded, or empty for return loading.

This in itself would have the effect of speeding the passing of cars through yards having interchanges with one or more railroads—where time and clerical detail are often a big factor in the prompt handling of trains from yards, after crews have been called, based upon the reported arrival of cars from a connection. With a home route card prepared as herein suggested, the clerical detail of making home route cards by yard office forces would be reduced to almost nothing. About the only home route cards needed to be made at junction points would be for the occasional empty moving from yard to yard for connection's return loading.

As the junction stamp is applied to waybills, it would likewise be applied to space #1 of the home route card; the next connection would stamp in the proper delivery space to its connection, or space #2, and so on in proper order. Such passing stamps provide time and date, junction point and name of railroad.

Let us take a specific example:

A Western Pacific car is being billed from San Francisco, Cal., to Jersey City, N. J. Say, for purposes of example only, that it is billed via W. P.-D. & R. G. W.-C. B. & Q.-Erie. When the car arrives at Salt Lake City, (D. & R. G. W. connection) the D. & R. G. W. makes a home route card for this car showing initial, number, kind of car, etc. When the car arrives at Denver (C. B. & Q. connection) it likewise makes its home route card, very similar to the one made by the D. & R. G. W. for use over its (C. B. & Q.) line. When the car reaches Chicago (Erie connection) the Erie in turn makes another home route card similar to those of the two preceding roads.

Now, after the car is made empty at Jersey City, let us assume that it is loaded either through error or the convenience of some shipper to Tampa, Florida—routed via any of the various lines, each of which issues its particular home route card for use while the car is on their respective lines.

Arriving at Tampa and again made empty, it receives

a load for some point in the South, East or Middle West, and so on until at some later date it again reaches a direct connection of the Western Pacific, or actually reaches its home rails with a load. All during this period many individual home route cards are made by the various lines handling the car.

With the suggested plan in effect, when car was billed to Jersey City by the billing agent at San Francisco, he would also make the home route card for this W. P. car, filling in only initial and number and kind of car. This would be attached to the billing and go forward with car to destination. Arriving at Salt Lake City, D. & R. G. W. interchange or junction forces would merely stamp the first, or #1, square of the home route card with a passing stamp—with practically the same motion as is used while stamping the same passing stamp on the waybill to which the home route card is attached (no making out, pinning, etc., as now). This passing stamp provides all information necessary for home route, at this or any other junction point, such as date, place, railroad, etc., the same would cover space #2 with the C. B. & Q. at Denver, space #3 with the Erie at Chicago and so on, as the car moves from one connection to another.

So handled, the agent or yard at some point having this car, say the Missouri Pacific, weeks or months later, would know by checking the route card in his possession just when and where the car was routed home. This would often save a wire to his car accountant, plus, perhaps, an additional wire to the owners to obtain short route information—all of which often entails delay, holding the car while waiting for such information.

The car might show up on the M. P. much closer to the D. & R. G. W. than would be the distance to the connection from which the car was received by the M. P. The improved route card would give the station or yard forces something to work on, in order to take action themselves to prevent unusually long circuitous home routing. At present they have no such knowledge.

In the West, where the distances between connections are greater than they are as a rule in the East, such information immediately available for short routing would have invaluable results in the saving of empty mileage, per diem and delay. Often, cars moving west loaded via one line are destined to a switching line for unloading, where they may find a load which takes the car to some point at or near the original gateway, where they subsequently show up empty. If yard and station forces are not alert to the possibilities of a connection beyond the last home route junction, cars return west empty, only to make a back-haul empty by the original home route road to approximately the same area to which cars last had been loaded and showed up empty.

The question will be raised that such home route cards would occasionally get lost or misplaced. That is true, but in such an event the various lines would not be any worse off than they are when present route cards get lost—that is, in such cases only the immediate receiving line and date could be furnished. I am inclined to believe that route cards do not so often get lost or separated from cars as may be expected. Perhaps cars show up without route cards because the route card was not made in the first place.

Had the card been already prepared and attached to billing, requiring only the touch of the passing stamp, the result would be fewer foreign cars moving without home route information; fewer wires asking for such information; less station, yard and general office detail for such information; less empty mileage; less car hire expense; more intensive use of cars.

Poll of Short Lines for the Facts About Materials

Conditions better than expected but many are roads out of essential items and hard put to get more

CONTRARY to expectations, the majority of the short lines—consisting principally of Class II and Class III railroad and switching and terminal companies—although smaller and less influential than the Class I railroads, have not been altogether neglected by the War Production Board and their suppliers and are generally getting enough material to keep going; this may also be said of the private car lines, although to a lesser degree. They have not been uniformly favored, however, and numerous companies, including those requiring maintenance materials frequently as well as those needing them only infrequently, are operating on a precariously low margin of protection and are having a nip-and-tuck time of it with the small amounts of materials they may purchase and the uncertainty of getting them. This is what an independent poll, which this paper has just made, indicates about the material situation facing this widely assorted and little known, though important, 3 per cent of the railway plant of the country.

Conditions Analyzed

The poll was taken by giving short lines and private car lines in all parts of the country a list of 22 kinds of scarce materials and 6 questions to find out if materials allotted to them by the War Production Board are being delivered within the time scheduled, to ascertain what priorities are given them for use in purchasing, to determine if the rate at which material is delivered is sufficient for essential needs at current rates of consumption, and also to learn of work interrupted by material shortages and to identify the materials which are creating acute problems.

Although short lines are distinguished from other railroads by their smaller size and traffic, they differ so widely among themselves in mileage, location, business, ownership and management that the experiences of one line are no certain criterion of others and averages afford a less representative view of conditions than with the larger and more completely integrated companies. One short line, for example, may have considerable track but no equipment, while another has little mileage and much equipment. Some lines perform important switching for trunk lines in large cities; while others are bridge companies or adjuncts of coal mines, industries, lumber camps or docks. Some handle only freight and others only passengers. Some are close to supply centers, while others operate far from the beaten paths of commerce; and scores of companies, many unheard of outside of their own environs, include both the rich and the poor. At the same time, these lines are, with few exceptions, part and parcel of the country's system of rail transport and, serving as most of them do one if not the only means by which raw and finished materials

vital to the war effort originate or reach their destination, any indicators of their experience in material procurement throw light on the strength and weakness of the railroad front in war time.

The results of the poll are given in a table insofar as the returns which have been received at this writing could be tabulated. While some lines answered the questions more in detail than others, almost all of the lines, according to the poll, have been receiving the materials allotted to them by the War Production Board within the time scheduled and are receiving materials in sufficient quantities for essential needs at the present rate of consumption. In most cases, materials are being purchased with an AA-1 priority, and most of the lines have working stocks of active materials good for 90 days or more. Very few lines are reporting stoppages of work for want of materials, and over half of them are free from acute want.

Some Roads in Trouble

On the other hand, the poll discloses numerous weak spots in the supply lines of the short lines and also of the private car lines, which threaten their continuity and efficiency of operation. Two lines are not receiving their allotments of rail within the time scheduled, and 10 per cent of the lines are not receiving their allotments of track fastenings on schedule. The corresponding score is 10 per cent with bridge steel; 8 per cent with track tools; 10 per cent with steel for springs; 12 per cent with boiler tubes and bar steel; 17 per cent with boiler plate; 14 per cent with sheet steel; 10 per cent with steel and malleable castings and 14 per cent with grey iron castings; 7 per cent with car wheels; 11 per cent with locomotive tires; 10 per cent with car axles; 13 per cent with machine parts; 8 per cent with steel pipe; and 6 per cent with electrical materials and journal bearings. Eighteen per cent are not getting cross ties on schedule, and the number is 17 per cent with bridge timber and 13 per cent with car lumber.

All the reporting roads are receiving enough bridge steel, track tools, cast iron wheels, car axles, steel pipe, electrical material, journal bearings and car lumber in time for essential needs at current rates of consumption, but deliveries of the required materials are insufficient on 5 per cent of the lines with track fastenings, 10 per cent with spring steel, 8 per cent with boiler tubes, 13 per cent with bar steel, 6 per cent with steel and malleable castings and 9 per cent with grey iron castings, 6 per cent with machine parts, 13 per cent with cross ties, and 10 per cent with bridge timber.

Priorities High for Some—Low for Others

While the majority of the short lines were given AA-1 priorities to obtain their requirements, of the iron and steel items in question 10 per cent had to manage with A-1-a priorities and from 15 to 40 per cent had to manage with priorities of A-1-j or less. One short line is now getting better than A-10 priority ratings for the first time. Despite authority to use A-1-j priorities for



track tools, and AA-1 priorities for other items of steel, one short line with 100 miles of line and 300 freight cars, all in war work, is not getting its allotment of track fastenings, boiler tubes, bar steel, boiler plate, sheet steel, grey iron castings or locomotive tires on schedule or fast enough for current needs, and is operating with only a month's working stock of bar steel, grey iron castings and car lumber. Again, a private car line which keeps

and growing worse. One road has obtained only one-fifth of the ties it should have received up to the present time and has no more ties in sight. The same line is finding it impossible to obtain creosoted bridge timbers. Another road, which has been getting treated ties for several years from a trunk line, is now confronted with the necessity of using untreated ties which it can obtain in one way or another from local producers.

How Short Lines and Private Car Lines Reported

	Materials allotted by WPB delivered on schedule		Rate of delivery adequate for essential needs		A-1-j or less	Priorities authorized for maintenance				Working stock in days		
	Yes	No	Yes	No		A-1-a	AA-2X and other	AA-1	None	30	60	90 or over
Rail	24	2	23	1	10	2	..	12	1	1	2	20
Track fastenings	33	5	37	2	10	3	2	21	1	7	5	18
Bridge steel	17	2	21	0	6	2	..	9	1	..	1	10
Track tools	34	3	36	0	13	2	1	18	1	3	4	18
Springs	28	3	31	1	7	2	1	22	2	2	2	18
Tubes, boiler	22	3	24	2	7	2	..	14	3	1	2	14
Steel, bar	28	4	30	4	7	2	..	21	3	5	5	11
Plate, boiler	24	5	28	1	8	2	..	15	4	..	3	14
Sheet, steel	24	4	28	1	6	2	..	18	2	2	2	13
Castings, steel	25	3	32	2	6	2	..	23	1	3	2	15
Castings, malleable	25	3	28	2	6	2	..	18	2	1	4	11
Castings, grey iron	27	4	31	3	6	3	..	19	1	3	4	13
Wheels, cast iron car	27	2	30	0	7	2	2	17	1	2	3	16
Tires, locomotive	23	3	26	1	7	2	1	13	2	..	1	15
Axles, car	20	2	24	0	6	2	1	12	2	..	1	15
Machine parts	27	4	30	2	8	2	2	17	3	5	1	13
Pipe, steel	26	2	34	0	7	2	..	22	2	4	5	13
Electrical material	32	2	33	0	9	2	..	21	2	4	5	10
Brass, journal	33	2	35	0	7	2	..	21	1	4	4	13
Cross ties	33	6	33	5	16	2	1	10	3	5	2	17
Bridge timber	29	5	25	3	10	2	6	8	4	1	1	16
Car lumber	23	3	28	0	10	2	4	10	2	2	3	9

no stock on hand and orders only enough material to maintain the cars it has in service is not getting its allotments of either steel, malleable or grey iron castings on schedule or within the time required.

Wide Differences Exist in Working Stocks

While the majority of the lines have an active stock of the items in question sufficient to last 90 days or more at prevailing rates of consumption, one or more of every 20 roads are operating without any stock of track fastenings, bridge steel, boiler tubes, bar steel, boiler plate, machine parts and even cross ties, bridge lumber and car lumber. Locomotive refueling is being held up by lack of flues in one place. Another line, which is essential to several trunk line operations, has stopped authorized rail relaying work for lack of track material; and an authorized program of rail work on the main tracks of another line has been held in abeyance until materials, now long on order, have been received. One road has been waiting for important machine parts since last August.

One-third of the lines, while experiencing no shutdowns, have acute material problems. Three lines are severely short of valves for locomotives, and one road has had to improvise valves by machining some old parts and using them with new parts but with unsatisfactory results. Two roads are in serious trouble for want of welding rod, and two are badly in need of bar steel. Several roads need boiler flues and copper ferrules. Other metals in acute demand on one or more roads include copper and all bronze metals, locomotive bearings, flat spring steel, locomotive tires, track fastenings, rubber cord for electrical work and firebox steel. One short line is critically short of boiler plate, locomotive tires and track fastenings; and one of the private car lines can't get center plates, draft lugs and bolsters for repairing its cars.

The tie and lumber situation is acute on several lines

The poll indicates that the success of some short lines in obtaining their material requirements have resulted, in part, from the facility with which they have been able to depend upon larger railroads or parent industries either for some of the material they need or assistance in obtaining adequate priorities. It is also evident that many of the lines which operate entirely independent of other railroads or industries have been handicapped by incomplete knowledge of the controls over the production and distribution of railway materials, also by the infrequency with which they purchased materials in the past and the small quantities of their purchases, which in some instances are below the quantities which suppliers care to handle under present conditions or are permitted to give preferential treatment.

The extent to which short lines have resumed or attempted to resume the practice indulged in during and following War I to pool their needs and consolidate their purchases of scarce materials with each other has not been determined, but the pressure to do so tends to increase with the reduced freedom with which railroads and industries can resell the materials purchased for their own need.

Conservation to an Extreme Degree

In the face of their difficulties in obtaining materials necessary for their operations, practically all of the short lines rely to a considerable extent on second hand materials and have in many cases carried conservation and substitution to extremes.

Even with these measures, however, most of the short lines and private car lines are finding it necessary to study their material conditions and working stock as never before and to protect their operations from breakdown in the face of the increased traffic most of them are now handling and the increased scarcity of many of the materials they require to rehabilitate and maintain the plant.

A Communication . . .

How Adequate Are Plans For War Transportation?

Colonel William J. Wilgus, writer of the communication which follows, was in France within 60 days after war was declared on Germany in April, 1917, and was prominently connected with land transportation for the A. E. F. throughout the first World War. For a time in 1917 he was Director of Railways, and thereafter was Deputy Director General of Transportation under Brig. Gen. Atterbury. Colonel Wilgus is the author of the standard treatise "Transporting the A. E. F. in Western Europe 1917-1919" and has been a painstaking student of military transportation problems for many years.

ASCUTNEY, VT.

TO THE EDITOR:

If, as seems certain to happen, the course of the war should involve invasion of Western Europe, it is among the possibilities that the Germans may be sufficiently victorious on the Eastern Front to enable them to divert to the Western Front as large a force as they had there in World War I—say 185 divisions, numbering some 6,000,000 (including army, corps, auxiliary, replacement, "on leave," invalid, construction, and services of supply troops and civilian aides). Sound strategy dictates that in this the worst conditions are to be anticipated and not the best. Against these the Allies, fully to protect their flanks, must have at least as many divisions as in the fall of 1918, numbering 243 of the European size and comprising in all some 7,750,000 men. In fact, to be safe, an additional 2,500,000 should be had in mind, as was the case in World War I as late as October, 1918. In a word, judging from the experiences of a generation ago, as many as 10,000,000 men from near and afar may perhaps be found to be necessary to defeat the Germans' 6,000,000 on their home soil.

On the basis of the Allied lesser requirement of 7,750,000 men, it may be assumed, for instance, that 2,000,000 will be supplied by the British as in 1918, 1,250,000 by the French and others (as against the 3,500,000 they were able to furnish under the happier circumstances of 1918) and the remainder by the Americans, say 4,500,000, as was contemplated in the last World War, on the assumption that there will be enough shipping. If conditions should impose the need for the larger Allied army of 10,000,000 men, the American contingent might have to be largely increased.

For an anticipated American army of some 4,500,000 men the needed daily supplies were estimated in 1918 to be 146,000 tons, of which 52,000 were to originate in France, Italy and Spain, 33,000 in other European lands, including 30,000 tons of coal from Great Britain, and 61,000 from the United States. In the present World War it is to be expected that all the daily needs will have to come from the United States, except the coal which may be obtainable from the other side. Hence it is necessary to figure on the trans-Atlantic transport of at least 116,000 tons daily or about 90 per cent more than in 1918. The 30,000 tons of coal per day from Great Britain, if obtainable there, would require a short-haul ocean movement. All would have to be moved inland for possibly 800 to 1,000 miles by rail, highway, inland waterway and in the air, and to some degree, perhaps, by pipeline. These figures make no allowance for losses enroute, for shipments to the other Allies, and for the needs of the civilian population.

It is to be expected that the enemy, as he retreats, will not only put the ports and canals out of business, but also the 6,000 miles or more of railroads over which the American army must function. Port and inland waterway facilities will need to be rebuilt, improved and expanded; tracks, bridges and tunnels put in order; storage facilities re-established; terminals, work-shops,

fuel and water stations provided; telegraph and telephone lines re-erected; multitudinous cars, locomotives, motor trucks, cranes, tools, water craft and cargo planes supplied; stockpiles of fuel and other materials accumulated; and a soundly organized skilled transportation personnel of all kinds installed for construction, maintenance and operation purposes alike in the interest of the army and the civilian population. In materials and men this task will call on the resources of our country to an extent that is little appreciated by a public intent on other products of the war effort such as ships, tanks, guns, bombers, food, oil and other things spoken of daily by radio and in the press.

It is well-known that the railroads at home are now operating at the approximate limit of their capacity, and that new equipment and materials are not yet on order to provide for the expansion in traffic which is now occurring (this expansion is reported to be running far beyond the increase of 10 per cent in ton-miles forecast for this year, and upon which serious underestimate the present meager program of additions and replacements was determined).

In view of its lack of reserves of all kinds, it may well be asked what the situation of necessary domestic transportation will be if (as seems most probable) a requisition is put upon the American railroads for the vast amount of material and equipment needed to supply our military railway and port needs in Western Europe. It too may well be asked what the situation will be if provision now being made for overseas skilled personnel, such as engine, train and yard crews, bi-lingual R. T. O. liaison officers, mechanics, cranesmen, tug captains and engineers, store-keepers, checkers, hatchmen and other pace-makers not made in a hurry, should prove to be inadequate, thereby necessitating a sudden call on the undermanned domestic transportation industry.

If our military authorities or civilian agencies in control of the production of war materials—in their preoccupation with more purely military items—have given adequate consideration to the above mentioned conditions, there is no evidence of public record to that effect. The Army is so used to securing land transportation from efficient commercial sources—without having to concern itself over the components of that transportation—that it is very difficult for it to adjust itself to an entirely novel situation in this respect. In the last war, with supply requirements far below the level required by a modern army today, the Americans had the aid of functioning French ports, inland waterways, and commercial railway lines. There is no reason whatever for a belief that the Germans will leave them there for us to use this time.

If transportation and Army men realize that the foregoing observations are factual—but cannot secure adequate consideration of them by the top military and production authorities—is it not their duty urgently to draw them to the attention of the proper Congressional committees which are inquiring into the conduct of the war?

WILLIAM J. WILGUS

Observations by Dr. Samuel Johnson

Life is a progress from want to want, not from enjoyment to enjoyment.

To act from pure benevolence is not possible for finite beings. Human benevolence is mixed with vanity, interest or some other motive.

Every man will dispute with great good humor on a subject in which he is not interested. I will dispute very calmly upon the possibility of another man's son being hanged.

Nobody attempts to dispute that two and two make four; but with contests concerning moral truth human passions are apt to be mixed and therefore it must ever be liable to assault and misrepresentation.

Railroads-in-War News

Fluid Port Traffic Aids African Armies

Santa Fe's "Indian Detours" operator runs two-way movement smoothly

American transportation men and American-built railway equipment are playing an important part in maintaining adequate supplies on the North African battle front, the War Department pointed out in an April 27 press release describing port operations in that area. Trains operating between the ports on the Atlantic and Mediterranean coasts and the supply centers back of the Tunisian battle line include both the older French box cars of the "40 hommes, 8 chevaux" type and new American tank cars, flat cars and gondolas, the statement disclosed. New locomotives made in this country are pulling these trains on regular schedules. Civilian French and native crews man most of the trains. United States troops guard the trains, but French troops usually guard the tracks and bridges, it was explained.

In order to make room for other incoming ships, goods must be moved away from the docks as rapidly as they can be unloaded, the statement pointed out, so supplies not immediately required at the front are sent to dumps at strategic points to be sorted and arranged for reloading on trains or trucks when needed. While munitions, gasoline and rations form the bulk of the material moved into Africa, an immense variety of merchandise is handled, it was indicated, as lend-lease cargoes pass through the ports along with military supplies. Moreover, substantial quantities of raw materials and scrap are loaded at the ports for the return voyage to this country.

At one "typical port" busy day and night with this two-way movement, the superintendent is Lieutenant Colonel Robert H. Clarkson, who before the war directed the operations of the Hunter Clarkson, Inc., southwestern bus and conducted tour services. Under his direction, soldier stevedores in the holds of the ships load the slings which the cranes swing to the docks, where crews of Arabs in long flowing robes take over the shells and tins of gasoline and cases of rations to load railway cars and trucks. Similar operations go on at the rate of a ton of supplies per month per man overseas, the War Department explained. While the return movement to this country is smaller, ships take on ballast or partial cargoes as fast as they are unloaded, generally such materials as phosphate rock, scrap metal, cork, damaged airplane engines, or any other usable salvage.

Eastman Appointed to WPB

Transportation finally got a seat at the War Production Board's head table last week when President Roosevelt appointed Joseph B. Eastman, director of the Office of Defense Transportation, as one of three additional members to the Board. The other two new appointees are Paul V. McNutt, chairman of the War Manpower Commission, and Petroleum Administrator for War Harold L. Ickes.

The appointments were generally interpreted as being in line with WPB Chairman Donald M. Nelson's recent moves to strengthen WPB's civilian supply set-up at a time when he is opposing pending legislation to establish an independent office of civilian supply.

Lieut. Col. Clarkson saw varied service in World War I, in which he entered the British army as a private and came out a major. He was born June 13, 1895, near Edinburgh, Scotland, and served in the British Isles, in Palestine, and elsewhere during that conflict, including an assignment to the staff of the brilliant British general, Lord Allenby.

While in the British service he was cited for bravery three times and awarded the military cross.

Returning to civilian life, Mr. Clarkson came to this country in 1921 and entered the employ of the Fred Harvey system, operators of stores, restaurants and railway concessions through the Southwest from Chicago to the Pacific coast. In 1925, with Harvey backing, he began the development of the "Indian Detours" and associated highway travel facilities of the Santa Fe Transportation Company in New Mexico and adjacent states, which he later expanded independently, in connection with the rail service of the Atchison, Topeka & Santa Fe, through the operations of Hunter Clarkson, Inc.

In December, 1941, Mr. Clarkson, who had meanwhile become an American citizen, joined the United States Army as a major, from which rank he was promoted in March of this year to his present rank in the Transportation Corps, attached to a port headquarters in North Africa. Preparations for operating this particular port were made long in advance of its occupation on November 11, 1942, Colonel Clarkson was quoted as saying, and after United States forces landed in North Africa the French navy took over the port from its civilian operators and made it available to American forces.

Featherbedding Is Put Up to Congress

McNear calls for law to end manpower wastes under "union racketeers"

Featherbed rules in time of war are treason, George P. McNear, Jr., president of the Toledo, Peoria & Western told the House of Representatives Military Affairs Committee in a statement presented in the course of his appearance before the committee April 23. After outlining in his statement the history and scope of featherbed rules in railroad train and engine service Mr. McNear went into details about the application of the so-called standard rules on the T. P. & W. under Office of Defense Transportation management and gave the committee figures which he said showed "ODT wastes" amounting to a 44 per cent increase in man-days per 100 train-miles and a 31 per cent increase in compensation per train-mile. (An analysis by *Railway Age* of transportation performance per employee on the T. P. & W. under Mr. McNear's regime and that of the O. D. T. appears on page 862 herein).

Mr. McNear appeared before the committee at the invitation of its chairman, Representative May, Democrat of Kentucky, in support of the bill (H. R. 2239) introduced in the House by Representative Smith, Democrat of Virginia, to "prohibit acts interfering with the full utilization of manpower" during the war. In this connection the witness suggested certain changes in the language of the bill to apply its provisions more specifically to transportation.

"With the great expansion of the organized labor business in recent years, featherbed practices are now rapidly spreading throughout all industry," said Mr. McNear's prepared statement. "At least 1,000,000 able-bodied, willing workers are today wastefully employed through the operation of featherbedding practices. . . . The workers themselves do not want featherbedding in these times. They realize that it is unpatriotic with the country facing serious crisis, but they are helpless because they are dominated by able and aggressive labor union racketeers whose primary interest is collecting union dues. The government itself has encouraged this scandalous development, influenced as it is by the political domination of the national labor leaders."

Since the executive agencies of the government will do nothing to end this "racket," the witness asserted, it becomes the function of Congress to free

for vital work the manpower so tied up.

"The public has been led to believe that the measure of the featherbed rules is the item of 'time paid for but not worked,' or over-payment to certain employees for short hours worked, and that the only effect is increased cost of operation," said Mr. McNear. "That is not the full story. These rules not only create numerous soft jobs and something for nothing for the employees who work under them; they require the wasteful employment of many unnecessary men; they require the wasteful use of motive power and other valuable equipment; they waste fuel, lubricants and other critical materials; and they cause delays to the service."

Then the witness described the operations of the National Railroad Adjustment Board, which, he said, "in most instances took advantage of technicalities arising from inept draftsmanship, and decided case after case against the railroads. . . . By such quasi-judicial procedure, the brotherhoods and the adjustment board have forced the railroads to accept rule interpretations which the railroads never anticipated and to which they would never have consented in direct negotiations."

Mr. McNear went on to say that "the full nature and present effect of all the featherbed rules has never been disclosed. The veil of secrecy has been well drawn. Now and then something has been said about some ridiculous rule and its effect. On two occasions in recent years, two emergency boards, appointed by President Roosevelt, have recommended that the matter of the rules be investigated."

"Nothing ever came from these recommendations."

Taking up the situation on the T. P. & W., the witness asserted that "under the terms of the President's executive order, Mr. Eastman was ordered to operate the railroad as he deemed necessary for the successful prosecution of the war. The President's order did not require Mr. Eastman to inaugurate the featherbed rules on our railroad. So far as we know, Mr. Eastman did that on his own responsibility. . . . Such expansion of crew and engine operation, for the purposes of dividing the work, equalizing the pay, and reducing individual earnings, is a flagrant waste of men and equipment."

"It is a poor example for one agency of our government to set, when other agencies of the government are searching for ways and means to develop manpower and to conserve critical equipment and materials."

During the period before operation of the T. P. & W. was taken over by the ODT, said Mr. McNear, "when we operated our railroad without featherbed rules, we conclusively demonstrated that a smaller number of better paid employees could successfully operate our railroad, provide more service and use less equipment and materials, than at any other time."

Answering a question, the witness suggested that management should determine what rules or agreements so interfere with effective utilization of manpower and equipment that they should be set aside to

RR's Steel Rations Cut

The War Production Board's Steel Division Director H. G. Batcheller, stated April 29 before a committee meeting of the American Institute of Mining and Metallurgical Engineers, that the railroads' steel requirements for the third quarter have been slashed 40 per cent from the O.D.T.'s request for 2,233,015 tons of steel to 1,350,000 tons, "regardless of what happens to their equipment in the next nine months." The reason that the railroads won't get all the steel they requested is that there is not enough to go around. Of the six largest steel consumers, the railroads in the third quarter will take the largest reduction relatively.

"This fall," said Mr. Batcheller, "since we cannot expect the railroads to continue passing miracles indefinitely in meeting the ever-rising traffic demands, the railroads are going to be in much greater trouble. Their equipment is wearing out. They are being pushed far beyond the limits of performance which can be reasonably expected. They will have to get along."

further the war effort. When pressed by Representative Sparkman, Democrat of Alabama, for an admission that the effect of this would be to do away with all mediation machinery set up by the government to resolve conflicts of this type, Mr. McNear said:

"I do not believe that these two-headed systems work very well. Somebody has got to be responsible." He agreed that it is the general idea that the railroad industry's mediation machinery has functioned exceptionally well, but this, he declared, is because "management loses out every time" a decision is reached through this machinery. "You can say peace reigns on the railroads," the witness pointed out, "because management is obliged to give in at every turn. That is what has been going on."

Continuing, Mr. McNear said he did not mean that collective bargaining should be done away with. He was opposed to wasteful labor practices that the bargaining machinery was protecting. If Congress would pass the legislation necessary to cut out these wasteful practices the railroads would not lose much time in getting their operations on a more efficient basis, he assured the committee. If management is given the opportunity to manage, he said, there would be little abuse of the right, because management has "learned quite a lot" in the last 15 years.

At the close of his testimony, the T. P. & W. president was asked to comment on the propriety of allowing foremen to join employees' unions or to have their own unions. "Why do it?" asked Mr. McNear. The foreman is a part of management, a man "on his way up," he said, repeating his belief in the soundness of "individual enterprise and private initiative" as contrasted

with a managed economy. When he bought the road at foreclosure sale in 1926, he said, he did not know anything about the railroad business. "All we did was operate the railroad so we could have some money left over at the end of the month," he declared, adding that the road had been "in the black" ever since 1927.

New N. M. B. Mediator

Cornelius E. Hurley, a dispatcher on the Central Vermont, has been appointed to the National Mediation Board's staff of mediators. The N. M. B. announcement said that Mr. Hurley has had 30 years of railway service, "and is thoroughly familiar with the workings of the Railway Labor Act."

1942 Commodity Statistics

Tons of revenue freight originated by Class I railroads in 1942 showed an increase of 15.8 per cent over 1941, according to the fourth-quarter statement of freight commodity statistics issued by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics. Last year's total was 1,421,323,374 tons as compared with 1,227,675,897 tons in 1941.

All groups showed increases over 1941, except the "all l. c. l. freight" category where the drop was 2.9 per cent. Meanwhile, however, the freight revenue from l. c. l. was up 10.5 per cent. The statement showed the total 1942 freight revenue at \$6,196,140,967, an increase of 34 per cent over 1941's \$4,624,692,524.

The range of increases in tons originated was from 10.1 per cent for manufactures and miscellaneous to 22.7 per cent for animals and products. The revenue-increase range was from the 10.5 per cent rise in revenues from l. c. l. to the 41 per cent jump in revenues from manufactures and miscellaneous.

Average L.c.l. Load Off a Bit

The average load per car of l. c. l. freight handled by Class I railroads in February was 20,461 pounds, the Office of Defense Transportation reported on April 27. This was a slight decrease from the January average of 20,549 pounds, but was higher than the 20,294 pounds reported for December, 1942. The number of cars loaded in February, 386,086, was an increase above the January total of 380,914 cars.

In announcing the February results the ODT pointed out that many special permits authorizing the use of cars for quantities less than the requirements of ODT General Order No. 1 were issued during the month to several important eastern roads, as the result of increased business, cold weather, and labor shortages at large transfer stations which made it advisable to by-pass one or more intermediate transfer points for the sake of efficiency. The effect of this situation was a decrease in the average load per l. c. l. car during February on these roads of 1,439 pounds, as compared with January, while the other Class I roads reported an increase of 597 pounds in the average load per car for the same period.

While there was an overall increase in the l. c. l. tonnage handled on Class I roads in February, Class II and III roads, in-

cluding switching and terminal lines, reported a slight decrease in the tonnage handled, though their average load per car for the month increased from January's 18,391 pounds to 18,449 pounds.

Freight forwarders reported a slightly increased load per car in February, when the figure was 41,119 pounds as compared to 41,105 pounds in January. The tonnage moved by forwarders also was slightly greater in February than in the previous month.

Locomotive Specialty Industry Advisory Committee Set Up

A Locomotive Specialty Industry Advisory Committee was recently created by the War Production Board with Andrew Stevenson of the WPB as presiding officer and with the following membership: J. A. Amos of the Pyle National Co., Chicago; Bard Browne, Superheater Co., New York City; George H. Carr, Locomotive Firebox Co., Chicago; S. G. Down, Westinghouse Air Brake Co., Wilmerding, Pa.; C. G. Learned, Okadee Co., Chicago; J. E. Long, Franklin Railway Supply Co., New York; Hunter Michaels, American Locomotive Co., New York; Alfred Nathan, Nathan Mfg. Co., New York; George A. Price, American Arch Co., New York; C. J. Surdy, Standard Stoker Co., Erie, Pa.; C. P. Whitehead, General Steel Castings, Eddystone, Pa.

The members of the committee met in Washington on April 14 at which time the question of the ability of the supply industry to meet the demand for locomotive equipment during the last half of 1943 and 1944 was discussed. Subsequent meetings will be held from time to time as called by Mr. Stevenson.

OPA's New Prices on Used Rail and Track Accessories

Warehouse prices for relaying rail are advanced and specific prices are established for used railroad track accessories under the Office of Price Administration's Maximum Price Regulation 46, effective May 1. Prices at warehouses for relaying rail weighing 60 lb. or more per yd. when new are increased \$3.84 per gross ton in carload lots, with a quantity limitation to not more than two carloads on rail weighing more than 70 lb. per yd. The increase is not justified on larger quantities of the heavier rail, the OPA said. The previous price was \$32 per gross ton.

Used track accessories are priced in the regulation from 10 to 30 per cent below mill prices for new accessories. The specific price ceilings replace the provision setting maximum prices at the seller's April 16, 1941, price or list prices on the new articles, whichever was lower. Covered specifically are used joint bars (including rail joint bars, angle bars, fish plates and splice bars), used tie plates, and used track bolts, nuts and spikes.

For track accessories originating from Class I railroads and switching or terminal companies, f. o. b. any station on the selling road, the prices per 100 lb. are: joint bars, \$1.85; tie plates, \$1.50; track bolts and nuts, \$3.50; track spikes, \$2.70. Dealers or jobbers on direct shipments

Transportation on the Air Next Saturday

A radio round-table discussion entitled "The Battle of Transportation" will be presented over the National Broadcasting Company's nationwide network on May 8 from 10:15 to 10:30 p. m., Eastern War Time, the Association of American Railroads has announced. Participating on the program will be Major General Charles P. Gross, chief of the Army Transportation Corps, Colonel J. Monroe Johnson, member of the Interstate Commerce Commission; and Warren C. Kendall, chairman of the A. A. R. Car Service Division. Albert R. Beatty, manager of the publicity section of the A. A. R. Public Relations Department, will act as forum leader.

from Class I roads may sell used track accessories at prices 25 cents per 100 lb. above those figures, and other specific prices are set in the regulation for the same articles sold from warehouses. Prices on these materials originating from other sources are established in relation to basing point cities and quantity differentials.

Rail-Truck Conservation Plans Get More ODT Study

New arrangements for the study of inter-city and intra-city rail-truck conservation were announced April 23 by the Office of Defense Transportation. In effect, inter-city rail-truck conservation studies will be initiated and carried on by committees of the Association of American Railroads and the American Trucking Association, while intra-city surveys will be made jointly by representatives of the ODT's Divisions of Railway and Motor Transport and referred to the carriers involved for their recommendations.

Details of the arrangement were set out in a joint letter to T. V. Rodgers, president of the A. T. A., and A. F. Cleveland, vice-president of the A. A. R. Both of these organizations have recently created committees to consider rail-truck conservation plans, the ODT explained. The joint letter states that the A. A. R. and the A. T. A. are to keep the ODT advised as to the areas where committees have been appointed and are to send in bi-weekly reports showing the progress being made.

C. P. R. Delivers Another Hospital Car

The Canadian Pacific reports that the second car to be built by it according to specifications of the Royal Canadian Army Medical Corps, for use as a traveling hospital, has been turned over to Col. G. A. Winfield, deputy director of medical services, by George Stephen, vice-president of traffic, of the C. P. R.

The car was formerly a compartment-observation sleeper known as the "Mount Kitchener" and the conversion job was carried out at the C. P. R.'s Angus shops in Montreal. The car provides toilet and

wash-room facilities and a ward with 14 double-deck steel beds to accommodate 28 men, a receiving vestibule with doors wide enough to allow entry of stretchers, a dispensary and medical supply lockers. Because this car has no facilities for cooking, it will be run either in conjunction with the first hospital car (which has a kitchen) put out for the R. C. A. M. C., or with a standard diner.

U. P. Issues Map of Military Posts

The Union Pacific is distributing a military map of the United States which shows all air fields, bases and stations, naval bases, army camps, forts and posts in the United States and lists the railroad station and post office address for each. The map measures 17 by 31 in. and is issued by the road's passenger department.

ODT Tire Tests

A 60-day test of tire tread wear on over-the-road trucks was started on April 29 by the Office of Defense Transportation, as part of its analysis of the effect of the 35-mile speed limit on rubber-borne transportation services.

The test is being conducted to determine specifically the degree of tread wear on tires of commercial motor vehicles under various speed limits. Factors contributing to rubber wear, such as loading, speed, temperature, braking and frequency of shifts will be recorded, and the results will be related to additional factors of manpower, vehicle wear and general operating efficiency.

The testing route is between Baltimore, Md., and Burlington, N. C., where 24 tractor-trailer combinations are being used. Six of the vehicles operate under a speed limit of 35 m. p. h.; six under a 40-mile speed limit and twelve at a 45-mile limit.

Eastern Oil Movement

Although there were 70,907 tank cars operating in the East coast petroleum movement on April 1, according to a telegram sent this week by Petroleum Administrator Ickes to the governors of the six New England states, who had wired him protesting against continuance of the severe restrictions on civilian use of gasoline in that territory, as compared with other sections of the country, shipments of gasoline into the Atlantic seaboard territory by tank car for civilian use are being approved only when necessary to relieve refineries of stock accumulations that would prevent manufacture of necessary war products, Mr. Ickes indicated.

Some improvement in the situation can be expected, the administrator added, when barge movement on the Great Lakes and through the New York canal gets under way, and particularly when the 24-inch pipeline from Norris City, Ill., to the seaboard refinery areas is completed. Meanwhile an anticipated further diversion to the East coast service of tank cars tied up in the Chicago switching district was indicated by a letter written by Fayette R. Dow, director of petroleum transport of the Office of Defense Transportation, to bulk suppliers in that territory, in which

he advised them to arrange with large fuel users for around-the-clock truck deliveries and increasing substitution of trucks for tank cars. In this letter Mr. Dow called attention to the example set at the South Chicago, Ill., plant of the Carnegie-Illinois Steel Corporation, where trucks now deliver 6 million gallons of heavy fuel oil per month, releasing 114 tank cars for the Atlantic seaboard movement.

Although some increase in the quantity of petroleum products delivered in District No. 1 was forecast by Mr. Ickes, this prediction was coupled with the warning that military demands are constantly increas-

ing as action continues in North Africa, while efforts are being made to build up stocks of heating oil at eastern distributing points, so that easier restrictions on civilian gasoline use in that section are not immediately in prospect, in his opinion. During the week ended April 17, tank car deliveries of oil to the Atlantic coast district averaged 922,467 barrels a day, a slight decrease from the record-breaking average of 924,079 barrels reported for the previous week. Box car shipments of kerosene in drums to New England points average 20,588 barrels a day during the week ended April 17, Mr. Ickes stated.

Materials and Prices

Following is a digest of orders and notices of interest to railroads, issued by the War Production Board and the Office of Price Administration since April 24.

Foundry equipment—General Preference Order E-11, issued April 23, provides that after June 1, no person may sell, transfer or deliver foundry equipment or electric metal melting furnaces

Cast iron pipe.—While the supply of pig iron and scrap iron is limited, the situation has not yet reached the point where restrictions upon the use of cast iron soil pipe for sanitary drains under buildings are necessary, J. F. Wilber, director of the Plumbing and Heating Division of WPB, said April 20.

Construction—Supplementary Conservation Order L-41-d, issued April 24, eliminates the restrictions on the re-siding or re-roofing of a structure with asbestos materials where any part of the existing siding or roofing is in need of maintenance or repair. However, no rubber, metal other than fastenings, or lumber may be used in the re-siding or re-roofing operations. Where repainting is necessary for maintenance and repair, a re-roofing or re-siding job using asbestos material instead may be undertaken. Although necessary maintenance and repair of a structure is not restricted by Order L-41, a re-siding or re-roofing job where any part of the existing siding or roofing is in need of repair has until now been restricted by the order.

except on orders bearing a preference rating of AA-4 or higher; nor may such equipment be purchased by the application of any preference rating on Forms PD-25a, 25f or CMP Regulation No. 5 or 5a. The equipment is listed in Schedule A of the order. All producers of foundry equipment and electric metal melting furnaces are affected by the order. It does not, however, prevent the sale and delivery of any part manufactured for use in the repair or maintenance of such equipment.

Inventories—Inventory Direction No. 6 to CMP Regulation No. 2, issued April 24, relieves persons engaged in constructing bridges, buildings and similar works who normally receive materials tailored for specific projects from being required to set up combined inventory records to include such materials. However, items for each project must be kept separate. Previously, the constructor might receive a steel shape for one job when he already had an identical piece of material on hand but marked for another project which had been delayed for one reason or another and thereby violate the CMP regulation.

Lumber—Minimum requirements for all purposes during 1943 are estimated at 31½ billion bd. ft., but returns from first-quarter production indicate that the output this year will be slightly less than 30 billion ft., the chief of the Program Section of the Lumber Division reported on April 19. Although there has been a drop of approximately 10 billion ft. in construction requirements as compared with last year, no additional lumber will be available for new uses because of the increased demand for boxes and crating and the possible increase for farm uses.

Pipe fittings—Limitation Order L-288, issued April 17, establishes control over grey cast iron, malleable iron and brass and bronze pipe fittings instead of Schedule II of Limitation Order L-42 which is revoked. The change follows the recent

transfer of supervision of Schedule II from the Plumbing and Heating Division to the Shipbuilding Division.

Substitutions—Issue No. 8 of the Material Substitutions and Supply List, issued April 22, lists more than 500 materials arranged in three groups, Group 1 listing materials which are insufficient in supply either for war demands alone or for war plus essential civilian demands. Group 2 listing materials which are sufficient for war and essential civilian production; and Group 3 listing materials available in sufficient quantity for use as substitutes for the more critical materials in Groups 1 and 2. Secondary grades of lumber are now actually more critical than some primary grades. Linseed oils, previously appearing in Group 3, are now in Group 2. Ferrous classifications remain about the same. Group 3 materials include caustic soda, muriatic acid, sulfuric acid, No. 3 beech, No. 5 Idaho white pine, No. 5 northern white pine, No. 5 Ponderosa pine, No. 2 and 3 red gum, No. 2 and 3 red oak, No. 3 southern pine shop selects, No. 3 western larch, No. 3 western red cedar, short fiber asbestos, brick, Portland cement, pitch, non-reinforced concrete, fiberboard, gypsum and products, lime, lubricating oil (except Penn grade), red lead, tile and turpentine.

Tool steel—Order M-21-h, as amended April 22, permits orders and deliveries of high-speed steel to any person in any calendar quarter which balance within 5 per cent by weight, or within 500 lb. (whichever is smaller), of the required ratio. If the total receipts do not exceed 100 lb. per quarter, they are exempted from the ratio which requires that 75 per cent of all high-speed steel orders accepted in any calendar quarter be Class A (molybdenum type) and not more than 25 per cent be Class B (tungsten type).

Vulcanized fibre—Allocation Order M-305, effective April 22, prohibits producers and fabricators from fabricating or delivering vulcanized fibre, except for uses approved by WPB upon application giving descriptions of proposed ultimate uses. Each person furnishing a certified description of the ultimate use with an order for vulcanized fibre must use the vulcanized fibre delivered on such order only for the purpose specified or specifically authorized. No person other than a producer may accept delivery of vulcanized fibre if his inventory would become greater than a 60-day supply. The certified description of the use may be placed on or attached to the purchase order.

Warehouse steel—Directive 5 under CMP Regulation No. 1, issued April 19, prohibits shipments of normalized or heat-treated carbon or alloy steels on any commercial warehouse order. If steel has already been normalized or heat-treated, it may be shipped when completed if the orders are validated in accordance with WPB regulations.

Coal—An Executive Order, announced April 23, centralized the government's policies and activities pertaining to solid fuels in a Solid Fuels Administration for War within the Department of the Interior with Secretary Ickes as Administrator. The new administration will absorb the Office of Solid Fuels Co-ordinator for War, and authorizes it to utilize the facilities of the Bituminous Coal Division and the Bureau of Mines. The adminis-

trator becomes the liaison between the solid fuels industries and government agencies on fuel questions under the administrator's jurisdiction. The order does not extend the administrator's jurisdiction to the present wage negotiations in the coal producing industry. The administrator is directed to recommend to OPA needed maximum price adjustments, and the price administrator will advise with the solid fuels administrator prior to changing or issuing new schedules of prices to be charged for solid fuels by producers, wholesalers or retail dealers.

Prices

Asphalt products—Amendment No. 2 to Maximum Price Regulation No. 323, effective April 28, gives sellers of special asphalt products additional methods by which they may establish their own ceilings and abolishes detailed reports on special asphalt products which sellers have been required to submit. Producers may continue to price under the original methods established in Regulation 323, using the highest price for the same product at which they sold in the August 1-November 1, 1941 period, or make a tentative price on the basis of a product with the nearest specifications. Reports must be submitted to OPA when the latter alternative is used. Processors of roofing flux, other than refiners, are allowed an increase in maximum prices for oxidized asphalt shown in tables of \$1 per ton for all reference points. The seller may now market in packages on the basis of either the gross or net ton, whichever was his practice during the base period. The maximum price allowed for delivery at destination is now predicated on the actual cost of the transportation rather than the rail transportation allowed in the original schedule.

Coal—Amendment No. 53 to Maximum Price Regulation No. 120 (bituminous coal), effective April 29, authorized additional compensation for production of lump coal of bottom size larger than 2½ in. shipped by rail from Production Groups 2 to 9 of District No. 14 (Arkansas-Oklahoma). Maximum prices were increased 15 cents per net ton. It was stated that the coal, though hitherto subject to the maximum price for Size Group 3, constituted in effect a separate size group.

Fuel oil—Amendment No. 94 to Revised Price Schedule No. 88, effective April 28, increased maximum prices 10 cents per bbl. for crude petroleum produced in the Plymouth Pool, McDonough County, Ill., and 8 cents per bbl. for black oils produced from the Elk Basin Field of Park County, Wyo. The ceiling on crude petroleum from the Plymouth Pool becomes \$1.15 per bbl. The Elk Basin Field maximum price becomes 90 cents per bbl.

Interpretations—A manual, issued April 26, contains 35 pages of interpretations of the General Maximum Price Regulation. The new pamphlet is the fourth of a series.

Lumber—Amendment No. 12 to Maximum Price Regulation No. 146 (Appalachian hardwood lumber), Amendment No. 4 to Maximum Price Regulation No. 223 (northern hardwood lumber) and Amendment No. 6 to Maximum Price Regulation No. 155 (central hardwood lumber), effective April 29, permit sellers of hardwood lumber to add the actual costs of custom kiln-drying and milling to their mill ceiling prices. The change extends the custom kiln-drying provisions already in Regulation No. 97 (southern hardwood lumber) to the other three hardwood regulations and adds a custom milling provision to all four. The provisions will have little effect on final prices being paid by purchasers of kiln-drying or milling, and is designed to eliminate inconveniences, loss of time and effort for purchasers who under the old provisions had to arrange for the kiln-drying or milling of the lumber they purchased.

Price exemptions—Revised Supplementary Regulation No. 1, effective April 22, revoking previous supplements, lists and regroups exemptions of commodity transactions from the General Maximum Price Regulation. It consolidates exceptions of this character, other than those which had become obsolete, but does not add any new ones. The change is consequently one of form only. Tables show in simplified form the present status of the exceptions which until now were included in the revoked regulations.

GENERAL NEWS

Warns South Against Political Rate Making

Henry sees push for complete "parity" which would hurt Southern industry

The belief, "amounting in some cases to a passionate conviction," that the South is the victim of freight rate discrimination "is based upon the constant repetition of statements which are not true," said Colonel Robert S. Henry, assistant to the president of the Association of American Railroads, in an April 23 address before the Kiwanis Club of Nashville, Tenn. Speaking only for himself, not for the A.A.R. which "has taken no position on this subject," Colonel Henry pointed out that commodity rates "are of the greatest importance" to the South, and warned that a movement starting out to obtain "parity" on class rates must inevitably head toward "parity" on all rates.

"If Southern political pressure succeed in getting 'parity' for a small part of the railroad rate structure," he said, "there is no way to keep other pressures from bringing about parity of all railroad rates and probably all transportation rates, with effects definitely harmful to Southern industry and agriculture, as well as to Southern railroads." The better way, in Colonel Henry's opinion, is to continue that "gradual process of step-by-step adjustment to fit individual situations," under which Southern industrial development "has gone forward since the first World War at a pace just about twice as fast as that of the supposedly favored East."

Leading up to his discussion of the freight-rate situation, Colonel Henry noted that one heritage from the Civil War has been the conviction on the part of Southerners that their section "is a step-child of the nation, the object of planned and deliberate discrimination." For more than half a century, he went on, this feeling centered around the tariff; but with the industrialization of the South the tariff "just got lost," although the feeling of sectional discrimination survived. "In its current manifestation, this conviction of discrimination centers about the railroad freight rates of the South, or, rather, an erroneous idea of a small part of the railroad freight rates under which business is done in the South."

Dealing with the constantly repeated statements "which are not correct," the speaker first took up the assertion that "freight rates" in the South are higher than they are in the East. He noted the

ment," i.e., that Southern class rates "are 39 per cent higher than in the East"; but he went on to point out that class rates are just one part of the Southern rate structure, "and by no means the most important part." Commodity rates on which the bulk of the South's traffic moves "are in many cases as low as and frequently lower than the corresponding rates in the North—a fact which is usually forgotten or ignored in discussions of the comparative rates of the two sections."

The second "erroneous statement" is that "rates" on manufactured articles are higher from the South to the North than in the reverse direction. "This is not true," said Colonel Henry. "Where class rates apply in both directions—that is, where there has been no special demand or need for a specially adjusted commodity rate—the rates southbound and those northbound are the same. The same thing is true where there are so-called exceptions to the class rates." In the many cases where commodity rates have been published, such rates are "almost without exception" lower from the South to the North than from the North to the South.

The speaker conceded that "by combing the millions of freight rates in the United States" it might be possible "to gather a few 'horrible examples' of rates northbound which are higher than those southbound on the same commodities moving in the same quantity between the same points." He added, however, that such examples would mean only that "there had been no call for the comparable northbound rate; where and when rates are needed and will be used, they are put in."

Colonel Henry identified "a third source of misunderstanding" as the "repeated statement that Southern manufacturers cannot get started, or cannot survive because of disparities in rates between some point in the South and some point in the North to some common market, about equally distant from the selected points." He called this "an interesting exercise in speculative commercial geography," which "doesn't mean much," because the Southern points selected "are usually those where the particular article named has not been manufactured, and where, consequently, there has been no need and no demand for a rate adjustment."

As an example of the latter, the A. A. R. executive cited "the recent prominent publication of the impossibility of running a shoe factory in Louisiana because the rate on shoes from there to Chicago is higher than the rate from Boston to Chicago." He pointed out that there are no shoes manufactured at the Louisiana point selected, adding that there are lots of shoes made at other points in the South, including Nash-

(Continued on page 885)

Finds Power to Fix Status of Workers

New ICC disclaimer of Labor Act authority shows brotherhoods another way

With Dissenting Commissioner Patterson complaining that the procedure suggested "is reminiscent of the technical pleadings required under the common law, which have long been outmoded," the Interstate Commerce Commission has issued a six-to-five decision telling railroad labor organizations that it would be able to decide for them certain employee-status questions if petitions are filed under the Interstate Commerce Act rather than under the Railway Labor Act where the commission has staked out for itself a relatively restricted role.

The decision is a report of the commission on reargument in the proceeding involving the status of engineers, firemen, conductor's, and brakemen engaged solely in handling over the tracks of the Nevada Northern, between Ruth, Nev., and McGill, trains engaged in transporting ore for the Nevada Consolidated Copper Corporation. Commissioner Eastman participated in the disposition of the case, joining the majority, while Commissioner Lee's concurrence "in the results" of the majority report was noted. Commissioner Patterson's dissent was subscribed to by Commissioners Porter and Miller, while a brief dissenting expression came from Chairman Alldredge and the dissent of Commissioner Rogers was noted.

As reported in the *Railway Age* of November 1, 1941, page 717, the proceeding was the subject of a prior report by the commission's Division 3; and the commission now holds that the Division "rightly dismissed the petition under the Railway Labor Act." The Division relied on the case involving the status of employees of a contractor operating ore docks of the Northern Pacific at Superior, Wisc. (see *Railway Age* of October 25, 1941, page 683). It was in that decision that the commission construed its authority and duties under the Railway Labor Act, restricting itself to the narrow role of amending and interpreting its existing orders defining work as that of an employee or subordinate official of a carrier, and disclaiming authority to determine whether a particular employer was a carrier or whether particular employees were employees of a carrier.

The ore-train operations involved are conducted under a trackage agreement giving the copper company for an indefinite term a "non-exclusive revocable license" to

conduct such operations. "There was," said the majority report, "no testimony or contention that the kind of work performed by the enginemen, firemen, conductors, and brakemen . . . differed from the kind of work defined in our orders as work performed by like employees of a carrier by railroad." It added that "there is no question, therefore, as to whether such orders should be amended or interpreted in this proceeding."

Meanwhile, respondents did not challenge the commission's jurisdiction to make a determination as to who is the employer of the ore-train operators. On the contrary, they urged that it be done, citing decisions which the commission thought it "important to observe" were not made "under the provisions of the Railway Labor Act, the only Act with which we are here concerned." From there the majority went on to uphold Division 3's action dismissing the petition, but nevertheless pointed out the Interstate Commerce Act route to the petitioners—the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, and the Switchmen's Union of North America.

"It does not follow," said the report, "that we would be without jurisdiction to determine the questions the parties would have us decide in a proper proceeding brought under the Interstate Commerce Act. Our jurisdiction under that act is very broad. The railroad is a carrier subject to the act. If it, in fact, operated the ore trains as a common carrier by railroad and employed the individuals engaged in the actual work on such trains, it may or may not have violated the provisions of that act. . . . In the case of such violations we have jurisdiction upon complaint or upon our own motion to institute an investigation. If such an investigation should include in its scope operation of the ore trains over the tracks of the carrier, the status of the carrier with respect to such operation and of the persons employed in handling the trains may be determined. Under the limited provisions of the Railway Labor Act, insofar as our authority is concerned, we can not make such findings, nor would we in this proceeding be warranted in making a determination under the Interstate Commerce Act, not here invoked and under which no issues have been presented."

Leading up to his complaint that the foregoing is a throw-back to the "outmoded" technical pleadings of the common law, Dissenter Patterson recalled how his dissent in the Superior ore dock workers case contended that the commission had jurisdiction under the Railway Labor Act "to determine whether workers are or are not railroad employees within the meaning of that act." The commission, he added, "consistently so found" from the passage of that act in 1926 until October 6, 1941, when the ore dock employees case was decided. "Here, a year and a half later," Commissioner Patterson went on, "the majority again shifts position and now find that we do not have jurisdiction under the Railway Labor Act but do under the Interstate Commerce Act."

With this admission of power, he thought the majority should have followed through

\$7 Billion "Shelf" of Federal Works for Post-War Period

Part 2 of the National Resources Planning Board's National Resources Development Report for 1943, which has just been distributed, discloses that an estimated \$7,695,000,000 "shelf of federal construction and improvement work was potentially available on January 1, 1943, for the post-war period." Parts 1 and 3 were previously printed and distributed when President Roosevelt sent the report to Congress, as noted in the *Railway Age* of March 13, page 521.

The "shelf" includes projects for the "promotion of transportation" estimated to cost a total of \$1,992,415,440 of which \$1,459,376,981 would have to be authorized by future Congressional action. Largest item of the transportation group is rivers and harbors, \$1,047,468,686. Others are: Roads, \$554,911,628; airports and airways, \$345,139,812; aids and assistance to navigation, \$44,247,147; railroads, \$648,167.

The railroad item, the report explains, "consists of a small program of projects reported by the Alaska Railroad for improvement and minor extensions to the Alaska Railroad System under the jurisdiction of the Department of the Interior."

to determine whether the ore-train operators are employees of the Nevada Northern. "The issues," he said, "are broad enough. The evidence of record, almost wholly confined to that question, is ample. Furthermore, it is necessary that we decide it, else we cannot know whether our order of July 17, 1940, effective August 1, 1940, which classified the work of all employees of railroads subject to our jurisdiction, is being fully complied with by the Nevada Northern."

Chairman Alldredge's brief dissent told how "careful study of the law in proceedings of this kind" had convinced him that the commission "should look upon the Railway Labor Act and the Interstate Commerce Act as implementing and reinforcing each other." He thinks that "both acts combined, fully empower us to determine the issues here presented."

Lackawanna Safety Awards

Annual awards for top honors in safety performance by the Lackawanna's transportation, mechanical, roadway and freight handling forces were made at a rally held in Scranton, Pa., on April 27, under the direction of Frank Cizek, superintendent of safety for the road. President White addressed the rally and distributed the awards.

Winners of the awards were as follows: J. H. Lerbs, superintendent of the Buffalo division (transportation department); Otto Sturm, master mechanic, Scranton division (mechanical department); E. F. Dinan, roadmaster, Stroudsburg, Pa. (roadway

department); T. C. Irland, agent, Scranton, Pa. (principal freight terminals), and F. O. Duval, agent, Hoboken, N. J. (freight stations and transfers).

Special awards were also made to supervisory officers whose forces worked throughout the entire year without a lost-time accident.

Guffey Coal Act Extended 30 Days

President Roosevelt has signed House Joint Resolution 113, the stop-gap measure which was enacted last week by Congress to extend the provisions of the Bituminous Coal Act of 1937 for a period of 30 days beyond April 30.

Club Meeting

The Northwest Carmen's Association will hold its next meeting at 8 p. m. on May 3 at the Midway Club, St. Paul, Minn. C. L. Heater, vice-president and chief engineer of the American Steel Foundries, Chicago, will address the meeting on the subject of "Freight Car Trucks."

New WPB Rail Section Chief

George C. Brunner, manager of railroad sales of the Tennessee Coal, Iron & Railroad Corporation, Birmingham, Ala., has been appointed chief of the rail section of the War Production Board's Steel Division, the WPB has announced. Mr. Brunner succeeds Orrin Baker, manager of railroad sales of the Carnegie-Illinois Steel Corporation, Chicago, who has resigned from his WPB post because of illness.

I. C. C. Service Order

Giving effect to the permit system for shipments of potatoes from Maine set up by the Food Distribution Administration, as reported in *Railway Age* of April 24, page 837, the Interstate Commerce Commission's Service Order 119, issued April 26 and effective until further order, forbids railroads and truck operators from accepting or moving potatoes from Maine except upon presentation of the required permit.

March Truck Freight Volume 21.1 Per Cent Over 1942

The volume of freight transported by motor carriers in March increased 13.6 over February and 21.1 per cent over March, 1942, according to the American Trucking Associations.

Comparable reports were received from 186 motor carriers in 38 states. They transported an aggregate of 1,431,554 tons in March, as against 1,259,827 tons in February, and 1,181,982 tons in March, 1942. The A. T. A. index figure, based on the 1938-1940 average monthly tonnage of the reporting carriers, was 195.30. The February index was 164.58.

Slightly more than 90 per cent of all tonnage transported in the month was transported by carriers of general freight. The volume in this category showed a 13.7 per cent increase over February and a 21.7 per cent increase over March of last year. Transporters of petroleum products, accounting for a little more than 5½ per

cent of the total, increased 17.1 per cent over February, and 28.3 per cent over March, 1942. Haulers of iron and steel products reported a little more than one per cent of the total tonnage; their volume showed an increase of 0.7 per cent over February, but decreased 4.6 per cent under March of last year.

Approximately three per cent of the total tonnage reported was miscellaneous commodities, including tobacco, milk, textile products, coke, bricks, building materials, cement and household goods. Tonnage in this class increased 11.8 per cent over February, and 7.4 per cent over March, 1942.

More ODT Field Offices

New field offices of the Office of Defense Transportation's Division of Railway Transport have been opened at Omaha, Neb., and Minneapolis, Minn., the ODT announced April 28. The Minneapolis office will be in charge of Seward F. Philpot, who has been trainmaster at that point of the Chicago, Milwaukee, St. Paul & Pacific, while the ODT supervisor of rail terminals at Omaha will be Edward P. Conry, who was terminal superintendent of the Union Pacific at Omaha before joining the ODT staff.

Chicago Railway Women Elect Officers

The Railway Business Women's Association of Chicago has elected the following officers for a two-year period: President, Barbara M. Zender, secretary to the controller of the Alton; first vice-president, Noreen Kinane, of the Central Freight Association; second vice-president, Mrs. Mable Dukes, of the Illinois Central; recording secretary, Marie C. Miller, of the Chicago, Rock Island & Pacific; corresponding secretary, Clarice Rector; and treasurer, Mrs. Elsie Heuerman, of the Pullman Company.

New OPA Grain Door Pricing

So that all railroads can compete on equal terms, the Office of Price Administration has revised its methods of pricing grain doors, it was announced April 27. This action, effective May 3, allows a manufacturer to figure a maximum price for any railroad which returns the same mill realization as the ceiling for railroads to which he actually sold in 1942. Since the mill realization will be the same on sales to new and old customers, the OPA explained, railroads that have to seek new suppliers will be better able to compete for purchases under this arrangement than under the delivered price ceilings heretofore set up.

Provisions making the new methods effective are embodied in Amendment 163 to Supplementary Regulation 14 of the General Maximum Price Regulation. In general, the new arrangement is accomplished by permitting a price adjustment to the extent by which the cost of making delivery to the purchasing railroad is greater, or less, than the cost of making delivery to the road that made purchases last year. The amendment also establishes a method for providing a ceiling for a type

of grain door which a producer did not sell in 1942, and, the OPA said, eliminates the possibility of wholesalers' mark-ups being added to mill prices.

Freight Car Loadings

Loadings of revenue freight for the week ended April 24 totaled 794,194 cars, the Association of American Railroads announced on April 29. This was an increase of 13,286 cars, or 1.7 per cent above the previous week, a decrease of 67,163 cars, or 7.8 per cent, below the corresponding week last year, and an increase of 72,567 cars, or 10.1 per cent, over the comparable 1941 week.

Loading of revenue freight for the week ended April 17 totaled 780,908 cars and the summary for that week, compiled by the Car Service Division, A.A.R. follows:

Revenue Freight Car Loadings			
For Week Ended Saturday, April 17			
District	1943	1942	1941
Eastern	158,355	171,581	152,185
Allegheny	174,547	185,762	151,914
Pocahontas	56,822	56,996	16,969
Southern	122,974	131,434	108,768
Northwestern ..	83,890	119,918	125,856
Central Western ..	111,700	115,923	102,883
Southwestern ..	72,620	64,791	50,218
Total Western Districts	268,210	300,632	278,957
Total All Roads	780,908	846,505	708,793
Commodities			
Grain and grain products	42,589	36,175	33,512
Live stock	15,154	12,801	11,502
Coal	170,024	166,742	33,404
Coke	14,932	13,919	9,153
Forest products ..	41,401	49,697	40,895
Ore	21,629	58,253	74,345
Merchandise l.c.l. ..	98,285	129,486	161,009
April 17	780,908	846,505	708,793
April 10	789,018	814,096	679,808
April 3	772,133	829,038	683,402
March 27	787,360	808,286	793,803
March 20	768,134	796,654	769,984

Cumulative Total, 16 Weeks ... 12,001,974 12,645,841 11,458,988

In Canada.—Car loadings for the week ended April 17 totaled 66,872 as compared with 66,439 for the previous week and 63,838 for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
April 17, 1943	66,872	38,879
April 10, 1943	66,439	40,251
April 3, 1943	65,167	39,715
April 18, 1942	63,838	33,426
Cumulative Totals for Canada:		
April 17, 1943	973,457	584,622
April 18, 1942	981,495	509,732
April 19, 1941	870,474	459,636

Non-Op Hearing Resumed

The hearings, which an emergency board has been conducting at Chicago since March 1 on the demands of the 15 non-operating unions for an increase in wages of 20 cents an hour, a minimum of 70 cents an hour and a closed shop and which were recessed on April 17, were resumed on April 28. At the time of going to press, it was understood that the rebuttal testimony would require five or six days and that oral argument would be completed next week.

At the opening of the session on April 28, the Chicago, Indianapolis & Louisville made an appearance and contended that the

board had no jurisdiction over the dispute with Monon dining car employees because mediation had not been completed on the Monon before the board began hearings. Counsel also contended that the board lacked the jurisdiction to mediate this dispute.

The first rebuttal testimony was presented by the unions. According to a statement made by their counsel at the opening of the session on April 28, two or three days would be required for the presentation of their rebuttal.

No Bids at Auction of T. P. & W. Real Estate

No bids were offered when real estate belonging to the Toledo, Peoria & Western was offered at a sheriff's sale at Peoria on April 17. The sale was held in an attempt to raise funds to satisfy a federal court judgment against the railroad corporation for unpaid balances on two parcels, containing 57 and 68 acres, respectively. George P. McNear, president of the T. P. & W., had refused to accept a check from the government to satisfy the judgment because he disapproved of the conditions attached to the acceptance by the Office of Defense Transportation. In a second telegram to the O. D. T. on April 16, he made a further demand that the government pay the judgment and asked Joseph B. Eastman, director of O. D. T., if he would be willing to recommend to President Roosevelt that advance payment be made on the basis of compensation for the government seizure. He also asserted that the government would be held responsible for all damages if it failed to pay the judgment and prevent the sale of the property. On the following day Mr. Eastman wired Mr. McNear that he was forwarding the check in payment of the judgment, pursuant to the terms of the executive order "constituting my authority but not pursuant to any request from you, which is unnecessary."

Katy Re-names Stations for Officers and Employees

A total of 109 time card stations on the Missouri-Kansas-Texas were re-named, effective April 4, as a compliment to officers and employees "now actively operating the property." Coincident with the re-naming of the stations, Mathew S. Sloan, chairman of the board and president, responded to a petition of South Texas officers and employees and consented to the re-naming of Nogalitos yard at San Antonio as Sloan yard because of the interest he has taken in its rehabilitation.

In the re-naming of the time card stations, all the executive and staff officers, the district superintendents and about 75 other employees were honored by having stations named after them. Of the 109 stations, 11 were on the Eastern district, 20 were on the Northern, 25 were on the Southern, 25 were on the North Texas, 24 were on the South Texas and 4 were on the Northwestern. While all of the new stations are listed in the working time cards, only a few of them are regular stops and appear in the time table folder.

In re-naming the stations, it was felt

that if there was some particular reason originally for the name, it had disappeared with the lapse of time and that it was wise to substitute for these names others which have significance in connection with the Katy.

Warns South Against Political Rate-Making

(Continued from page 882)

ville, whose manufacturers have "found no difficulty in selling shoes all over the United States because of differentials in freight rates in favor of Boston or St. Louis or any other point—because there aren't any."

Coming to his discussion of "the facts about raw materials," Colonel Henry disposed of the charge that the South is being "drained" of raw materials because of the freight rate adjustment. He used figures from the study of carload freight on two representative days in 1942, which was prepared by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics and introduced as an exhibit in the Nos. 28300 and 28310 investigations of the class rate structure and Consolidated Freight Classification. On the two days in question, Colonel Henry said, the Southern roads originated 31,860 carloads of products of agriculture, animals and products, products of mines, and products of forests. Of the total, 17,825 cars or 56 per cent not only originated but terminated in the South; 12,811, or 31 per cent, terminated in the North. And the latter included 6,926 cars of coal.

The speaker did not think anyone would want stop this movement of coal, or call it a "drainage" of raw materials. The next largest South-North movement was 2,308 cars of forest products, but only 177 of these were loaded with raw materials, the remainder being used to move manufactured forest products. Here again, Colonel Henry didn't think any Southerner advocated that "the railroads should make rates to prevent the lumber mills of the South from competing in the North with those on the Pacific Coast."

Third and fourth largest items were crude petroleum (1,195 cars) and citrus fruits and vegetables (664 cars). Are these the kind of materials "the South objects to having 'drained'?" the speaker asked. He added that "the great 'drainage' of raw materials, therefore, simmers down to a maximum of not more than 1,000 carloads a day." And "in contrast with these shipments of raw materials, there were originated in the South on these two days 10,301 cars of manufactured and miscellaneous articles. Of these, 3,178, or 31 per cent, moved to the North; 5,687, or 55 per cent, stopped in the South; the balance went west. Comparison of the figures shows the complete hollowness of the fallacy that the South is being 'drained' of desirable raw materials and is impotent in their manufacture."

With the "fallacies" thus disposed of, Colonel Henry turned his attention to "where the South's rates are lower," i. e., its commodity-rate adjustment. There he

pointed out that the I. C. C. "has commented more than once upon the fact that the higher class rate scale in the South than in the North has helped the shippers and the railroads of the South to maintain relatively low commodity rate adjustments." He knew of no measure of the "average freight rate" of the different sections, but noted that "in most of the recent years" the average revenue per ton-mile has been slightly lower in the South than in the East; although in 1942 it happened to be the same in both sections—9.47 mills.

"If class rates in the South are reduced to the Northern level, and there is no compensating advantage elsewhere," Colonel Henry went on, "the Southern railroads will be the less able to make the physical improvements and the service improvements which the growing industry and agriculture of this section will most certainly demand after the war. A railroad is no different from any other business in that on its operations as a whole it must take in enough money to meet its payrolls, pay its bills, pay the interest on its debts, keep in physical shape to do its job, pay its taxes, and maybe pay a little to the owners who have invested their money in it—though the last, to be sure, seems to be regarded in many quarters as something reprehensible and immoral."

Then came the A. A. R. executive's warning of the adverse effect on Southern economy of "parity" on all freight rates. He recalled that at the recent I. C. C. hearings in Nos. 28300 and 28310, Walter R. McDonald, chairman of the Georgia Public Service Commission, had testified that he was advocating uniformity as to all rates. Colonel Henry gave his audience a look at what this would do to a few Southern industries, giving specific examples of how it might be expected to hurt manufacturers of paper and pulp, stoves, paper boxes, hardwood flooring, and brick.

Would Fix Freight Rates According to Zones

Establishment of scales of railroad freight rates according to zones similar to those forming the basis for Post Office Department rates on parcel-post mail is proposed in identical bills introduced in the House by Representative Patman of Texas and in the Senate by Senator Stewart of Tennessee, Democrats. The bills—H. R. 2547 and S. 1030—are among the latest of the uniform-rate proposals which have been going in since Congress received the summary report on interterritorial freight rates from the Board of Investigation and Research created by the Transportation Act of 1940.

Mr. Patman had his bill printed in the Appendix to the April 21 Congressional Record. He said it "has been very carefully prepared by experts and is considered by informed persons to be the best approach to the problem of eliminating discriminatory freight rates." Mr. Stewart offered his bill on the following day, noting that he would have more to say about it "at a later date."

Their proposal is to amend the Interstate Commerce Act by inserting a new

section 1a. That new section would stipulate that for the purpose of the establishment of rates for the transportation of property by railroad, the United States "shall be divided into units of area 30 minutes square, identical with a quarter of the area formed by the intersecting parallels of latitude and meridians of longitude, represented on appropriate maps or plans, and such units of area shall be the basis of eight railroad rate zones." The bill then goes on to give the specifications for each zone. Like the parcel-post grid, the first zone would embrace distances up to 50 miles, the others grading upward with the eighth embracing distances beyond 1,800 miles.

It would be the duty of the Interstate Commerce Commission to establish on this zone basis "just and reasonable rates which are uniform, in relation to distance, throughout the United States." In order to give effect to this mandate the commission would be directed to prepare and make public the proposed scales within nine months after the bill's enactment. It would be required to enter upon hearings within 12 months after the enactment, and to order the establishment of the net set-up determined upon within two years from the commencement of the hearings. This idea of putting the commission on a specific timetable came from the B. I. R. report which had recommended such legislative procedure for effecting a uniform rate structure.

Burlington Passenger Car Collides With Freight

Four persons were killed and 15 were injured, 2 or 3 seriously, when a rail motor passenger car and the locomotive of a freight train of the Chicago, Burlington & Quincy collided head-on on the Fox River branch one and one-half miles south of Montgomery, Ill., at 5:30 p.m. on April 27. Those killed were the engineman, the baggageman, a mail clerk and an assistant chief clerk of the United States Railway Mail Service who was riding with the mail clerk. The persons injured were passengers. The accident occurred on a single track at the approach to a curve. The gasoline rail car, which was one and one-half hours late, was northbound and the freight locomotive was southbound.

Interchange Rules 70 and 98

Owing to the urgent need for conserving steel, the General Committee of the A.A.R. Mechanical Division, upon recommendation by the Committee on Wheels and the Arbitration Committee, has authorized revision of interchange Rule 70 and interpretation No. 4 to Rule 98, to permit substitution of one-wear wrought-steel wheels as correct repairs for multiple-wear wrought-steel, cast-steel and steel-tired wheels on freight equipment cars up to and including 70 tons capacity.

A circular letter, dated April 15, states that effective May 1, 1943, the above rule and interpretation are modified to read as follows:

Rule 70. (a) The following substitutions are wrong repairs:

1. Wrought-steel wheels (multiple-wear)

substituted with cast-iron, cast-steel or steel-tired wheels, if car is stenciled "wrought-steel wheels."

2. One-wear wrought steel wheels substituted with cast-iron, cast-steel or steel-tired-wheels, if car is stenciled "1-W wrought-steel wheels."

3. Cast-steel wheels substituted with steel-tired wheels, if car is stenciled "cast-steel wheels." Substitution of cast-iron or one-wear wrought-steel wheels for cast-steel wheels does not constitute improper repairs.

4. Steel-tired wheels substituted with cast-iron or cast-steel wheels, if car is stenciled "steel-tired wheels."

5. Cast-iron wheels substituted with one-wear wrought-steel, cast-steel or steel-tired wheels. (Car need not be stenciled "cast-iron wheels.")

(b) Wrought-steel wheels (multiple-wear or one-wear) may be substituted for cast-steel or steel-tired wheels, and the betterment charge is proper against car owner regardless of responsibility for the repairs.

(c) Double-plate shall not be substituted for single-plate cast-iron wheels. For the purpose of this rule a single-plate wheel and a double-plate wheel mounted on same axle shall be considered as a pair of double-plate wheels, and charged and credited accordingly. Defect card is not required for such improper substitution of wheels. (See Rule 98, Section (c-4), for charges and credits.)

(d) The substitution of multiple-wear wrought-steel wheels for cast-iron wheels or one-wear wrought-steel wheels standard to car, does not constitute improper repairs. If such substitution is made, however, account owner's responsibility, the charge is to be based on A.S.R. prices but in no case to exceed A.A.R. prices for new cast-iron wheels or new one-wear wrought-steel wheels standard to car.

(e) The substitution of one-wear wrought-steel wheels for multiple-wear wrought-steel wheels, cast-steel wheels or steel-tired wheels does not constitute improper repairs, except on passenger equipment cars, freight cars equipped for passenger-train service, or freight cars of over 70 tons capacity.

(No change in interpretation Nos. 1, 2 and 3.)

Rule 98. Interpretation No. (4) Q.—What method should be used in charging for cast-iron wheels or cast-steel wheels when applied in place of multiple-wear wrought-steel wheels standard to car?

A.—In case of owner's defects: Charge should be made against car owner for the wheels applied on basis of secondhand value of cast-iron or cast-steel wheels (irrespective of application of new or secondhand cast-iron or cast-steel wheels), journal bearings, journal wedges, box bolts and dust guards, when renewed, as well as the labor R. & R. Credit will be allowed for value of wrought-steel wheels removed on basis of full flange contour, less labor cost of turning when necessary. Defect card to be applied for the wrong wheels.

In correcting these repairs on authority of defect card the owner should bill for the labor and not value of journal bearings, journal wedges, box bolts and dust guards, if renewed.

In case of delivering line defects: The above ruling applies except that no charge should be made against owner for journal bearings, journal wedges, box bolts, dust guards, and labor R. & R., nor labor for turning the wheels removed when occasioned by delivering line defects on same; credit to be allowed car owner for entire loss of service metal due to same cause.

Note.—The same principles apply in the case of cast-iron wheels substituted for one-wear wrought-steel wheels except that credit for the wheels removed shall be allowed car owner on basis of prices per Rule 101; no charge for turning.

The same principles also apply in the case of cast-steel wheels substituted for one-wear wrought-steel wheels, except that charge for wheels applied shall be on basis of their secondhand value, while credit for the wheels removed shall be allowed car owner on basis of prices per Rule 101; no charge for turning.

Note.—Secondhand double-plate cast-iron wheels substituted under any of the above conditions shall be charged at scrap value.

These modifications will be included in the first supplement to the current code.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

- ALLIED RAILWAY SUPPLY ASSOCIATION.—J. F. Gettrust, P. O. Box 5522, Chicago, Ill.
- AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, G. M. & O. R. R., 105 W. Adams St., Chicago, Ill.
- AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. P. Soebbing, Railway Exchange Bldg., St. Louis, Mo.
- AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York, N. Y.
- AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—F. O. Whiteman, Room 332, Dearborn Station, Chicago, Ill. Annual meeting, May 18-20, 1943, La Salle Hotel, Chicago, Ill.
- AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill.
- AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. Borger, C. I. & L. Ry., 836 S. Federal St., Chicago, Ill.
- AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elinor Heffern, Room 822, 310 South Michigan Avenue, Chicago, Ill. Annual meeting, October 19-21, 1943, Hotel Sherman, Chicago, Ill.
- AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York.
- AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—H. C. Millman, Ind. Agent, Pennsylvania R. R., Union Station, Chicago, Ill.
- AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill.
- AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—Page N. Price, Norfolk & Western Magazine, Roanoke, Va.
- AMERICAN SHORT LINE RAILROAD ASSOCIATION.—J. H. Hunt, Tower Bldg., Washington, D. C.
- AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York, N. Y. Semi-Annual meeting, June 14-16, 1943, Los Angeles, Cal.
- Railroad Division.—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago, Ill.
- AMERICAN TRANSIT ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York, N. Y.
- AMERICAN WOOD PRESERVERS' ASSOCIATION.—H. L. Dawson, 1427 Eye St. N. W., Washington, D. C.
- ASSOCIATION OF AMERICAN RAILROADS.—H. J. Forster, Transportation Bldg., Washington, D. C.
- Operations and Maintenance Department.—Charles H. Buford, Vice President, Transportation Bldg., Washington, D. C.
- Operating-Transportation Division.—L. R. Knott 59 E. Van Buren St., Chicago, Ill.
- Operating Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
- Transportation Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.

- Fire Protection and Insurance Section.—W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York, N. Y.
- Freight Station Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
- Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
- Protective Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
- Safety Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
- Telegraph and Telephone Section.—W. A. Fairbanks, 30 Vesey St., New York, N. Y.
- Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill.
- Construction and Maintenance Section.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill.
- Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill.
- Signal Section.—R. H. C. Balliet, 30 Vesey St., New York, N. Y.
- Mechanical Division.—Arthur C. Brown, 59 E. Van Buren St., Chicago, Ill.
- Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago, Ill.
- Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington, D. C.
- Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.
- Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington, D. C.
- Car Service Division.—E. W. Coughlin (Assistant to Chairman), Transportation Bldg., Washington, D. C.
- Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington, D. C.
- Accounting Division.—E. R. Ford, Transportation Bldg., Washington, D. C.
- Treasury Division.—E. R. Ford, Transportation Bldg., Washington, D. C.
- Traffic Department.—A. F. Cleveland, Vice-President, Transportation Bldg., Washington, D. C.
- ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Claim Agent, Alton R. R., 340 W. Harrison St., Chicago, Ill.
- BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—P. R. Austin, Johns-Manville Sales Corp., Merchandise Mart, Chicago, Ill.
- CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcell Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month, except June, July and August, Windsor Hotel, Montreal, Que.
- CAR DEPARTMENT ASSOCIATION OF ST. LOUIS, MO.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.
- CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago, Ill.
- CAR FOREMEN'S ASSOCIATION OF CHICAGO.—Ralph J. Feddor, 2803 N. Campbell Ave., Chicago, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.
- CENTRAL RAILWAY CLUB OF BUFFALO.—Mrs. M. D. Reed, 1840-42 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.
- EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—J. T. Bougher, 7124 Lincoln Drive, Philadelphia, Pa.
- EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York, N. Y. Regular meetings, second Friday of January, March, April, May, October and November, 29 W. 39th St., New York, N. Y.
- MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y.
- NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington, D. C. Annual meeting, September 14-16, 1943, Edgewater Beach Hotel, Chicago, Ill.
- NATIONAL RAILWAY APPLIANCES ASSOCIATION.—C. H. White, Room 1826, 208 S. La Salle St., Chicago, Ill.
- NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Touraine, Boston, Mass.
- NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.
- PACIFIC RAILWAY CLUB.—William S. Wollner, P. O. Box A, Sausalito, Cal. Regular meetings, second Thursday of each alternate month, at Palace Hotel, San Francisco, Cal., and Hotel Hayward, Los Angeles, Cal.
- RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago, Ill. (News continued on page 890)

UNION PACIFIC RAILROAD COMPANY

Forty-Sixth Annual Report — Year Ended December 31, 1942

TO THE STOCKHOLDERS OF UNION PACIFIC RAILROAD COMPANY:

The Board of Directors submits the following report for the year ended December 31, 1942, of the operations and affairs of the Union Pacific Railroad Company, including lines leased from Oregon Short Line Railroad Company, Oregon-Washington Railroad & Navigation Company, Los Angeles & Salt Lake Railroad Company and The St. Joseph and Grand Island Railway Company. The lessor companies have certain income and charges, and the figures in the Income Account, other than those relating

to transportation operations, and in the Profit and Loss Account and General Balance Sheet and tabulations and tables relating thereto are stated on a consolidated basis, *excluding offsetting accounts between the companies.*

Income

The operating mileage at close of year and income for the year 1942, compared with 1941, were as follows:

	1942	1941	INCREASE	DECREASE
Operated Mileage at Close of Year				
Miles of road.....	9,836.94	9,870.77	.....	33.83
Miles of additional main track.....	1,537.86	1,537.92	.....	.06
Miles of yard tracks and sidings.....	4,304.27	4,310.03	.....	5.76
Total Mileage Operated.....	15,679.07	15,718.72	.....	39.65
Transportation Operations				
Operating revenues.....	\$353,064,543.08	\$218,091,994.24	\$134,972,548.84	
Operating expenses.....	219,039,130.43	159,997,894.58	59,041,235.85	
Revenues over expenses.....	\$134,025,412.65	\$58,094,099.66	\$75,931,312.99	
Taxes.....	61,744,143.59	17,784,641.71	43,959,501.88	
Railway Operating Income.....	\$72,281,269.06	\$40,309,457.95	\$31,971,811.11	
Rents from use of joint tracks, yards, and terminal facilities.....	1,802,117.44	1,559,762.67	242,354.77	
	\$74,083,386.50	\$41,869,220.62	\$32,214,165.88	
Hire of equipment—debit balance.....	\$10,328,128.04	\$9,048,383.48	\$1,279,744.56	
Rents for use of joint tracks, yards, and terminal facilities.....	2,730,538.63	2,285,463.65	445,074.98	
	\$13,058,666.67	\$11,333,847.13	\$1,724,819.54	
Net Income from Transportation Operations.....	\$61,024,719.83	\$30,535,373.49	\$30,489,346.34	
Income from Investments and Sources other than Transportation Operations				
Income from oil operations in Southern California—net.....	\$7,790,678.43	\$4,542,499.41	\$3,248,179.02	
Dividends on stocks owned.....	4,285,213.50	4,547,965.00		\$262,751.50
Interest on bonds, notes, and equipment trust certificates owned.....	2,208,436.78	2,179,417.28	29,019.50	
Income from unfunded securities and accounts.....	323,267.63	184,450.15	138,817.48	
Rents from lease of road and equipment.....	181,508.03	232,838.28		51,330.25
Miscellaneous rents.....	390,799.92	348,753.36	42,046.56	
Miscellaneous income.....	618,958.70	751,178.23		132,219.53
Total.....	\$15,798,862.99	\$12,787,101.71	\$3,011,761.28	
Total Income.....	\$76,823,582.82	\$43,322,475.20	\$33,501,107.62	
Fixed and Other Charges				
Interest on funded debt.....	\$13,642,641.03	\$13,619,757.81	\$22,883.22	
Interest on unfunded debt.....	491,806.98	313,833.21	177,973.77	
Miscellaneous rents.....	31,635.69	13,467.34	18,168.35	
Miscellaneous charges.....	573,514.45	517,997.33	55,517.12	
Total.....	\$14,739,598.15	\$14,465,055.69	\$274,542.46	
Net Income from All Sources.....	\$62,083,984.67	\$28,857,419.51	\$33,226,565.16	
DISPOSITION OF NET INCOME				
Dividends on Stock of Union Pacific Railroad Co.:				
Preferred stock:				
2 per cent paid April 1, 1942.....	\$1,990,862.00			
2 per cent paid October 1, 1942.....	1,990,862.00	\$3,981,724.00	\$3,981,724.00	
Common stock:				
1½ per cent paid April 1, 1942.....	\$3,334,365.00			
1½ per cent paid July 1, 1942.....	3,334,365.00			
1½ per cent paid October 1, 1942.....	3,334,365.00			
1½ per cent payable January 2, 1943.....	3,334,365.00	13,337,460.00	13,337,460.00	
Total Dividends.....	\$17,319,184.00	\$17,319,184.00		
Surplus, Transferred to Profit and Loss.....	\$44,764,800.67	\$11,538,235.51	\$33,226,565.16	

Expenditures Chargeable to Investments in Road and Equipment Property

Extensions and Branches.....	\$ 1,704.26	Credits to investment in Road and Equipment Property:	
Additions and Betterments (excluding equipment).....	7,130,206.41	Cost of property retired and not replaced.....	\$ 3,572,752.78
Equipment.....	15,022,952.61	Cost of equipment retired.....	1,053,753.11
		Total Credits.....	\$ 4,626,505.89
Total Expenditures.....	\$22,154,863.28	Net increase in investment in "Road and Equipment Property".....	\$17,528,357.39

Operating Results for the Year 1942 Compared with Year 1941

	1942	1941	Increase	Decrease	Per Cent
Average miles of road operated.....	9,856.45	9,878.40	.....	21.95	24.
OPERATING REVENUES					
1. Freight.....	\$282,241,762.85	\$180,272,441.59	\$101,969,321.26	.....	56.6
2. Passenger.....	45,793,903.42	21,554,470.79	24,239,432.63	.....	112.5
3. Mail.....	6,209,043.77	6,242,147.18	.....	\$33,103.41	5
4. Express.....	5,606,469.70	5,516,164.16	3,090,305.54	.....	122.8
5. Other passenger-train.....	6,261,538.26	2,772,333.45	3,489,204.81	.....	125.9
6. Switching.....	2,500,884.50	2,076,420.96	424,463.54	.....	20.4
7. Other.....	4,450,940.58	2,658,016.11	1,792,924.47	.....	67.5
8. Total operating revenues.....	\$353,064,543.08	\$218,091,994.24	\$134,972,548.84	.....	61.9
OPERATING EXPENSES					
9.*Maintenance of way and structures.....	\$45,570,296.54	\$26,981,583.33	\$18,588,713.21	.....	68.9
10.*Maintenance of equipment.....	59,889,098.15	45,803,175.36	14,085,922.79	.....	30.8
11. Total maintenance.....	\$105,459,394.69	\$72,784,758.69	\$32,674,636.00	.....	44.9
12. Traffic.....	5,148,256.71	5,246,944.91	.....	\$98,688.20	1.9
13. Transportation—rail line.....	94,219,700.36	71,621,704.87	22,597,995.49	.....	31.6
14. Miscellaneous operations.....	7,404,479.07	4,459,483.23	2,944,995.84	.....	66.0
15. General.....	6,807,299.60	5,885,002.88	922,296.72	.....	15.7
16. Total operating expenses.....	\$219,039,130.43	\$159,997,894.58	\$59,041,235.85	.....	36.9
17. Revenues over expenses.....	\$134,025,412.65	\$58,094,099.66	\$75,931,312.99	.....	130.7
TAXES					
18. State and county.....	\$9,600,000.00	\$9,571,952.45	\$28,047.55	.....	3
19. Federal income.....	\$42,526,201.58	\$2,039,241.51	\$40,486,960.07	.....	—
20. Federal capital stock.....	1,812,031.50	378,891.50	1,433,140.00	.....	378.2
21. Federal unemployment insurance.....	3,878,172.96	2,882,970.13	995,202.83	.....	34.5
22. Federal retirement.....	3,878,145.86	2,883,538.57	994,607.29	.....	34.5
23. Other federal.....	49,591.69	28,047.55	21,544.14	.....	76.8

General Balance Sheet — Assets

	December 31, 1942	December 31, 1941	Increase	Decrease
Investments:				
ROAD AND EQUIPMENT.....	\$1,017,326,273.24	\$999,797,915.85	\$17,528,357.39	
Less:				
Receipts from improvement and equipment fund.....	\$23,823,091.13	\$23,823,091.13		
Appropriations from income and surplus prior to July 1, 1907, credited to this account.....	13,310,236.52	13,310,236.52		
Total.....	\$37,133,327.65	\$37,133,327.65		
701. Road and equipment property.....	\$980,192,945.59	\$962,664,588.20	\$17,528,357.39	
703. SINKING FUNDS.....	\$50.00	\$875.00		\$825.00
704. DEPOSITS WITH TRUSTEES IN LIEU OF MORTGAGED PROPERTY.....	\$3,847,435.55	\$14,354,350.47		\$10,506,914.92
705. MISCELLANEOUS PHYSICAL PROPERTY.....	24,532,578.02	24,743,053.22		210,475.20
Total.....	\$28,380,013.57	\$39,097,403.69		\$10,717,390.12
706. Investments in affiliated companies:				
Stocks.....	\$19,424,941.91	\$19,424,941.91		
Bonds, notes, and equipment trust certificates.....	6,035,782.38	6,367,178.12		\$331,395.74
Advances.....	10,907,817.58	10,970,351.70		62,534.12
Total.....	\$36,368,541.87	\$36,762,471.73		\$393,929.86
707. Investments in other companies:				
Stocks.....	\$63,380,981.35	\$63,380,981.35		
Bonds, notes, and equipment trust certificates.....	41,962,376.46	42,701,494.47		\$739,118.01
Total.....	\$105,343,357.81	\$106,082,475.82		\$739,118.01
707½. RESERVE FOR ADJUSTMENT OF INVESTMENTS IN SECURITIES (Credit).....	\$34,072,305.88	(a) \$34,072,370.88		\$175.00
Total Investments.....	\$1,115,312,512.96	(a) \$1,109,635,243.56	\$5,677,269.40	
Current Assets:				
708. CASH.....	\$48,954,293.85	\$36,854,166.07	\$12,100,127.78	
709. TEMPORARY CASH INVESTMENTS (U. S. Gov't securities).....	53,071,600.00	6,000,000.00	47,071,600.00	
711. SPECIAL DEPOSITS.....	1,064,705.68	897,381.68	167,324.00	
712. LOANS AND BILLS RECEIVABLE.....	1,081.67	62,399.45		\$61,317.78
713. TRAFFIC AND CAR-SERVICE BALANCES—NET.....	2,934,219.19	4,668,622.64		1,734,403.45
714. NET BALANCE RECEIVABLE FROM AGENTS AND CONDUCTORS.....	11,583,973.69	3,619,318.37	7,964,655.32	
715. MISCELLANEOUS ACCOUNTS RECEIVABLE.....	20,600,386.90	7,771,494.19	12,828,892.71	
716. MATERIAL AND SUPPLIES.....	41,933,468.65	33,648,741.62	8,284,727.03	
717. INTEREST AND DIVIDENDS RECEIVABLE.....	949,943.31	916,886.06	33,057.25	
718. RENTS RECEIVABLE.....	141,694.81	152,159.29		10,464.48
719. OTHER CURRENT ASSETS:				
Baltimore and Ohio Railroad Co. capital stock applicable to payment of extra dividend of 1914.....	111,451.10	111,531.10		80.00
Miscellaneous items.....	9,902.36	111.37	9,790.99	
Total Current Assets.....	\$181,356,721.21	\$94,702,811.84	\$86,653,909.37	
Deferred Assets:				
720. WORKING FUND ADVANCES.....	\$77,651.48	\$121,090.49		\$43,439.01
722. OTHER DEFERRED ASSETS.....	17,198,406.80	5,811,931.35	\$11,386,475.45	
Total Deferred Assets.....	\$17,276,058.28	\$5,933,021.84	\$11,343,036.44	
Unadjusted Debits:				
723. RENTS AND INSURANCE PREMIUMS PAID IN ADVANCE.....	\$41,516.89	\$57,642.92		\$16,126.03
725. DISCOUNT ON FUNDED DEBT.....	573,134.36	604,828.40		31,694.04
727. OTHER UNADJUSTED DEBITS.....	6,957,973.94	4,760,149.68	\$2,197,824.26	
Total Unadjusted Debits.....	\$7,572,625.19	\$5,422,621.00	\$2,150,004.19	
Grand Total.....	\$1,321,517,917.64	(a) \$1,215,693,698.24	\$105,824,219.40	

(a) Restated to conform with change in Interstate Commerce Commission classification under which the "Reserve for adjustment of investments in securities," formerly included in "Appropriated Surplus," is now deducted from total investments.

[Advertisement]

Operating Results for the Year 1942 Compared with the Year 1941—Continued

24.	Total federal.....	\$52,144,143.59	\$8,212,689.26	\$43,931,454.33	.....	534.9
25.	Total taxes.....	\$61,744,143.59	\$17,784,641.71	\$43,959,501.88	.....	247.2
26.	Railway operating income.....	\$72,281,269.06	\$40,309,457.95	\$31,971,811.11	.....	14.1
27.	Equipment rents (debit).....	10,328,128.04	9,048,383.48	1,279,744.56	.....	27.9
28.	Joint facility rents (debit).....	928,421.19	725,700.98	202,720.21	.....	99.8
29.	Net railway operating income.....	\$61,024,719.83	\$30,535,373.49	\$30,489,346.34	.....	11.32
	Per cent—Operating expenses of operating revenues.....	62.04	73.36	.....	.....	15.4
	FREIGHT TRAFFIC (Commercial Freight only)					
61.9	Tons of revenue freight carried.....	45,568,297	33,824,223	11,744,074	.....	34.7
68.9	Ton-miles, revenue freight.....	27,185,067,113	18,738,920,553	8,446,146,560	.....	45.1
30.8	Average distance hauled per ton (miles).....	596.58	554.01	42.57	.....	7.9
30.8	Average revenue per ton-mile (cents).....	1.038	.962	.076	.....	48.4
44.9	Average revenue per freight-train mile.....	\$8.74	\$5.89	\$2.85	.....	86.8
	PASSENGER TRAFFIC (Excludes Motor Train, other than Streamlined Train)					
66.0	Revenue passengers carried.....	3,941,870	2,109,885	1,831,985	.....	100.2
15.7	Revenue passengers carried one mile.....	2,570,621,803	1,283,992,931	1,286,628,872	.....	7.2
36.9	Average distance hauled per passenger (miles).....	652.13	608.56	43.57	.....	85.2
130.7	Average passengers per passenger-train mile.....	162.09	87.52	74.57	.....	6.3
	Average revenue per passenger-mile (cents).....	1.776	1.670	.106	.....	97.3
	Average revenue per passenger-train mile, passengers only.....	\$2.88	\$1.46	\$1.42	.....	84.1
	Average total revenue per passenger-train mile.....	\$3.70	\$2.01	\$1.69	.....
	* Includes depreciation and amortization charges:					
	Maintenance of way and structures.....	\$364,048.18	\$90,041.82	\$274,006.36	.....	304.3
	Maintenance of equipment.....	12,087,723.53	8,431,380.77	3,656,342.76	.....	43.4

General Balance Sheet—Liabilities

	December 31, 1942	December 31, 1941	Increase	Decrease
751. Capital Stock:				
Common stock.....	\$222,302,500.00	\$222,302,500.00		
Preferred stock.....	99,591,580.79	99,591,580.79		
Total Capital Stock.....	\$321,894,080.79	\$321,894,080.79		
755. Funded Debt.....	368,553,760.00	371,643,180.00	.....	\$3,089,420.00
Total.....	\$690,447,840.79	\$693,537,260.79	.....	\$3,089,420.00
754. Grants in Aid of Construction.....	\$9,113,079.76	\$9,243,217.26	.....	\$130,137.50
757. Due to Affiliated Companies.....	\$8,522,803.23	\$7,854,478.28	\$668,324.95	
Current Liabilities:				
760. AUDITED ACCOUNTS AND WAGES PAYABLE.....	\$16,687,467.95	\$14,700,899.62	\$1,986,568.33	
761. MISCELLANEOUS ACCOUNTS PAYABLE.....	1,344,021.79	785,193.73	558,828.06	
762. INTEREST MATURED UNPAID:				
Coupons matured, but not presented.....	879,179.26	569,373.01	309,806.25	
Coupons and interest on registered bonds, due first proximo.....	4,072,620.20	4,088,396.10	.....	\$15,775.90
763. DIVIDENDS MATURED UNPAID:				
Dividends due but uncalled for.....	233,867.14	187,360.18	46,506.96	
Extra dividend on common stock declared January 8, 1914, payable to stockholders of record March 2, 1914, unpaid.....	120,279.05	120,362.07	.....	83.02
Dividend on common stock payable second proximo.....	3,334,365.00	3,334,365.00	.....
764. UNMATURED INTEREST ACCRUED.....	686,557.91	693,055.00	.....	6,497.09
766. UNMATURED RENTS ACCRUED.....	228,797.10	276,388.88	.....	47,591.78
767. ACCRUED TAX LIABILITY.....	51,043,131.35	9,472,679.45	41,570,451.90	
768. OTHER CURRENT LIABILITIES.....	1,326,009.23	953,656.56	372,352.67	
Total Current Liabilities.....	\$79,956,295.98	\$35,181,729.60	\$44,774,566.38	
Deferred Liabilities:				
770. OTHER DEFERRED LIABILITIES.....	\$12,903,730.88	\$11,327,557.32	\$1,576,173.56	
Unadjusted Credits:				
772. PREMIUM ON FUNDED DEBT.....	\$84,393.02	\$88,411.73	.....	\$4,018.71
773. RESERVE FOR FIRE INSURANCE.....	11,230,055.07	10,670,484.20	\$559,570.87	
(a) RESERVE FOR DEPRECIATION.....	143,142,923.85	(b) 133,707,985.14	9,434,938.71	
(c) RESERVE FOR AMORTIZATION OF NATIONAL DEFENSE PROJECTS.....	4,196,461.28	(b) 186,751.13	4,009,710.15	
778. OTHER UNADJUSTED CREDITS:				
Contingent interest.....	1,941,972.07	1,900,496.74	41,475.33	
Miscellaneous items.....	11,062,241.52	4,467,279.59	6,594,961.93	
Total Unadjusted Credits.....	\$171,658,046.81	\$151,021,408.53	\$20,636,638.28	
Total Liabilities.....	\$972,601,797.45	\$908,165,651.78	\$64,436,145.67	
Surplus:				
APPROPRIATED FOR ADDITIONS AND BETTERMENTS.....	\$30,926,328.88	\$30,840,876.23	\$85,452.65	
FUNDED DEBT RETIRED THROUGH INCOME AND SURPLUS.....	1,903,078.66	1,674,858.66	228,220.00	
SINKING FUND RESERVES.....	50.00	875.00	.....	\$825.00
Total Appropriated Surplus.....	\$32,829,457.54	(d) \$32,516,609.89	\$312,847.65	
774. Profit and Loss—Credit Balance.....	276,516,492.91	235,441,266.83	41,075,226.08	
Total Surplus.....	\$309,345,950.45	(d) \$267,957,876.72	\$41,388,073.73	
This consolidated balance sheet excludes all intercompany items, securities of the Los Angeles & Salt Lake Railroad Company and The St. Joseph and Grand Island Railway Company owned by other System companies are not included. The difference between the par and face value of such securities as carried on the books of the issuing companies (less unextinguished discount on the bonds and discount charged to Profit and Loss but added back in consolidating the accounts) and the amounts at which the securities are carried on the books of the owning companies is set up here to balance.....	\$39,570,169.74	\$39,570,169.74		
Grand Total.....	\$1,321,517,917.64	(d) \$1,215,693,698.24	\$105,824,219.40	

(a) Accounts 775, 776 and 777.
 (b) Restated—"Reserve for amortization of National Defense projects," was included in "Reserve for depreciation" in 1941 balance sheet.
 (c) Accounts 775½ and 776½.
 (d) Restated.

[Advertisement]

NEWS

(Continued from page 886)

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen Bradley Company, 624 W. Adams St., Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York,

N. Y. Meets with Telegraph and Telephone Section of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 507 Shell Bldg., St. Louis, Mo. Annual meeting, May 4, 1943, Hotel Statler, St. Louis, Mo.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elinor Heffern, Room 822, 310 S. Michigan Ave., Chicago, Ill. Annual meeting, September 21-23, 1943, Hotel Sherman, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with A. A. R. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—D. W. Brantley, C. of Ga. Ry., Savannah, Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, O. and C. Company, 59 E. Van Buren St., Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 112 Hatfield Place, Port Richmond, Staten Island, N. Y. Annual meeting, October, 1943.

WESTERN RAILWAY CLUB.—E. E. Thulin (Executive Secretary), 122 S. Michigan Ave., Chicago, Ill. Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.

Operating Revenues and Operating Expenses of Class I Steam Railways

FOR THE MONTH OF FEBRUARY, 1943 AND 1942

Item	United States		Eastern District		Southern District		Western District	
	1943	1942	1943	1942	1943	1942	1943	1942
Miles of road operated at close of month	229,570	231,593	56,521	56,920	43,473	43,900	129,576	130,773
Revenues:								
Freight	\$513,191,392	\$377,590,195	\$200,275,117	\$157,515,263	\$103,582,249	\$73,997,810	\$209,334,026	\$146,077,122
Passenger	107,224,427	54,745,804	42,811,819	26,549,678	23,540,828	10,849,005	40,871,780	17,347,121
Mail	9,139,238	8,180,270	3,131,461	2,983,896	1,627,538	1,434,481	4,380,239	3,761,893
Express	8,640,782	4,811,191	3,055,282	1,704,893	1,451,586	878,513	4,133,914	2,227,785
All other operating revenues	25,337,947	17,155,370	10,809,660	8,336,166	3,678,433	2,329,731	10,849,854	6,489,473
Railway operating revenues	663,533,786	462,482,830	260,083,339	197,089,896	133,880,634	89,489,540	269,569,813	175,903,394
Expenses:								
Maintenance of way and structures	72,039,479	47,520,095	27,831,496	19,483,521	13,680,329	9,859,876	30,527,654	18,176,698
Maintenance of equipment	105,115,681	89,961,913	45,704,238	41,753,814	19,600,272	16,783,694	39,811,171	31,424,405
Traffic	9,978,494	9,353,669	3,668,654	3,377,215	1,954,879	1,942,113	4,354,961	4,034,341
Transportation—Rail line	199,597,832	163,950,690	91,601,148	76,130,636	34,180,320	27,740,942	73,816,364	60,079,112
Transportation—Water line								
Miscellaneous operations	7,673,088	4,617,403	2,811,024	1,934,506	1,319,207	797,991	3,542,857	1,884,906
General	14,054,733	12,200,163	5,864,989	4,939,666	2,683,395	2,296,607	5,506,349	4,963,890
Railway operating expenses	408,459,307	327,603,933	177,481,549	147,619,358	73,418,402	59,421,223	157,559,356	120,563,352
Net revenue from railway operations	255,074,479	134,878,897	82,601,790	49,470,538	60,462,232	30,068,317	112,010,457	55,340,042
Railway tax accruals	133,403,619	58,921,997	41,527,228	23,985,675	35,033,048	13,795,410	56,843,343	21,140,912
Railway operating income	121,670,860	75,956,900	41,074,562	25,484,863	25,429,184	16,272,907	55,167,114	34,199,130
Equipment rents—Dr. balance	12,286,896	8,820,384	5,229,976	4,474,470	975,604	315,676	6,081,316	4,030,238
Joint facility rent—Dr. balance	3,251,188	2,791,243	1,579,800	1,423,857	416,557	302,511	1,254,831	1,064,873
Net railway operating income	106,132,776	64,345,273	34,264,786	19,586,536	24,037,023	15,654,720	47,830,967	29,104,017
Ratio of expenses to revenues (per cent)	61.6	70.8	68.2	74.9	54.8	66.4	58.4	68.5
Depreciation included in operating expenses	26,358,061	18,837,537	11,098,554	8,161,421	5,029,485	4,147,506	10,230,022	6,528,610
Deferred maintenance—Way and structures	19,055						19,055	
Amortization of defense projects	10,478,984	4,041,608	4,135,416	1,771,936	2,515,986	1,001,638	3,827,582	1,268,034
Deferred maintenance—Equipment	d59,048				d3,647		d55,401	
Major repairs—Equipment	250,000						250,000	
Pay-roll taxes	15,118,770	12,426,494	6,575,870	5,537,717	2,631,597	2,207,450	5,911,303	4,681,327
Federal income taxes*	95,177,093	26,437,555	25,117,145	9,628,324	27,440,524	7,522,929	42,619,424	9,286,302
All other taxes	23,107,756	20,057,948	9,834,213	8,819,634	4,960,927	4,065,031	8,312,616	7,173,283

FOR TWO MONTHS ENDED WITH FEBRUARY, 1943 AND 1942

Miles of road operated at close of month	229,628	231,617	56,538	56,929	43,484	43,902	129,606	130,786
Revenues:								
Freight	\$1,027,552,700	\$770,157,831	\$401,391,049	\$321,450,172	\$210,513,057	\$152,355,204	\$415,648,594	\$296,352,455
Passenger	218,949,586	110,443,041	88,877,082	54,024,747	46,712,259	20,904,768	83,360,245	35,513,526
Mail	18,801,523	17,086,395	6,527,795	6,202,745	3,368,481	3,015,896	8,905,247	7,867,754
Express	17,597,094	9,502,381	6,328,509	3,205,841	3,005,459	1,692,082	8,263,126	4,604,458
All other operating revenues	52,012,035	35,981,296	22,842,510	17,487,667	7,223,456	4,883,004	21,946,069	13,610,625
Railway operating revenues	1,334,912,938	943,170,944	525,966,945	402,371,172	270,822,712	182,850,954	538,123,281	357,948,818
Expenses:								
Maintenance of way and structures	145,077,896	96,992,989	57,109,617	39,954,160	27,617,043	19,638,376	60,351,236	37,400,453
Maintenance of equipment	212,849,003	184,401,732	92,536,465	85,550,456	40,016,336	34,554,134	80,296,262	64,297,142
Traffic	20,163,881	19,065,628	7,412,475	6,821,561	3,859,991	3,965,759	8,891,415	8,278,308
Transportation—Rail line	410,255,000	340,936,098	187,097,355	156,933,366	70,260,731	57,846,315	152,896,914	126,156,447
Transportation—Water line								
Miscellaneous operations	15,932,932	9,828,918	5,819,672	4,143,909	2,693,808	1,660,693	7,419,452	4,024,316
General	28,381,886	25,117,504	11,782,897	10,050,946	5,416,654	4,837,593	11,182,335	10,228,965
Railway operating expenses	832,660,598	676,342,869	361,758,481	303,454,368	149,864,563	122,502,870	321,037,554	250,385,631
Net revenue from railway operations	502,252,340	266,828,075	164,208,464	98,916,804	120,958,149	60,348,084	217,085,727	107,563,187
Railway tax accruals	260,414,072	112,238,102	82,417,065	46,651,495	69,884,241	27,291,657	187,112,766	38,294,950
Railway operating income	241,838,268	154,589,973	81,791,399	52,265,309	51,073,908	33,056,427	108,972,961	69,268,237
Equipment rents—Dr. balance	23,668,926	17,473,156	9,633,485	8,862,171	1,910,420	190,548	12,125,021	8,420,437
Joint facility rent—Dr. balance	6,695,031	5,920,778	3,378,194	3,008,723	834,177	640,992	2,482,660	2,271,063
Net railway operating income	211,474,311	131,196,039	68,779,720	40,394,413	48,329,311	32,224,887	94,365,280	58,576,737
Ratio of expenses to revenues (per cent)	62.4	71.7	68.8	75.4	55.3	67.0	59.7	70.0
Depreciation included in operating expenses	52,904,252	36,590,228	22,371,570	16,420,826	10,056,660	7,738,874	20,476,022	12,430,528
Deferred maintenance—Way and structures	77,860						77,860	
Amortization of defense projects	19,860,870	7,903,306	7,643,909	3,108,322	5,011,642	1,874,226	7,205,319	2,920,758
Deferred maintenance—Equipment	d93,428				d8,457		d84,791	
Major repairs—Equipment	250,000						250,000	
Pay-roll taxes	30,975,509	25,750,301	13,401,486	11,396,016	5,456,111	4,556,127	12,117,912	9,798,158
Federal income taxes*	183,120,405	46,255,448	49,352,212	17,735,122	54,361,659	14,549,381	79,406,534	13,970,945
All other taxes	46,318,158	40,232,353	19,663,367	17,520,357	10,066,471	8,186,149	16,588,320	14,525,847

* Includes income tax, surtax, and excess-profits tax.

d Decrease, deficit, or other reverse items.

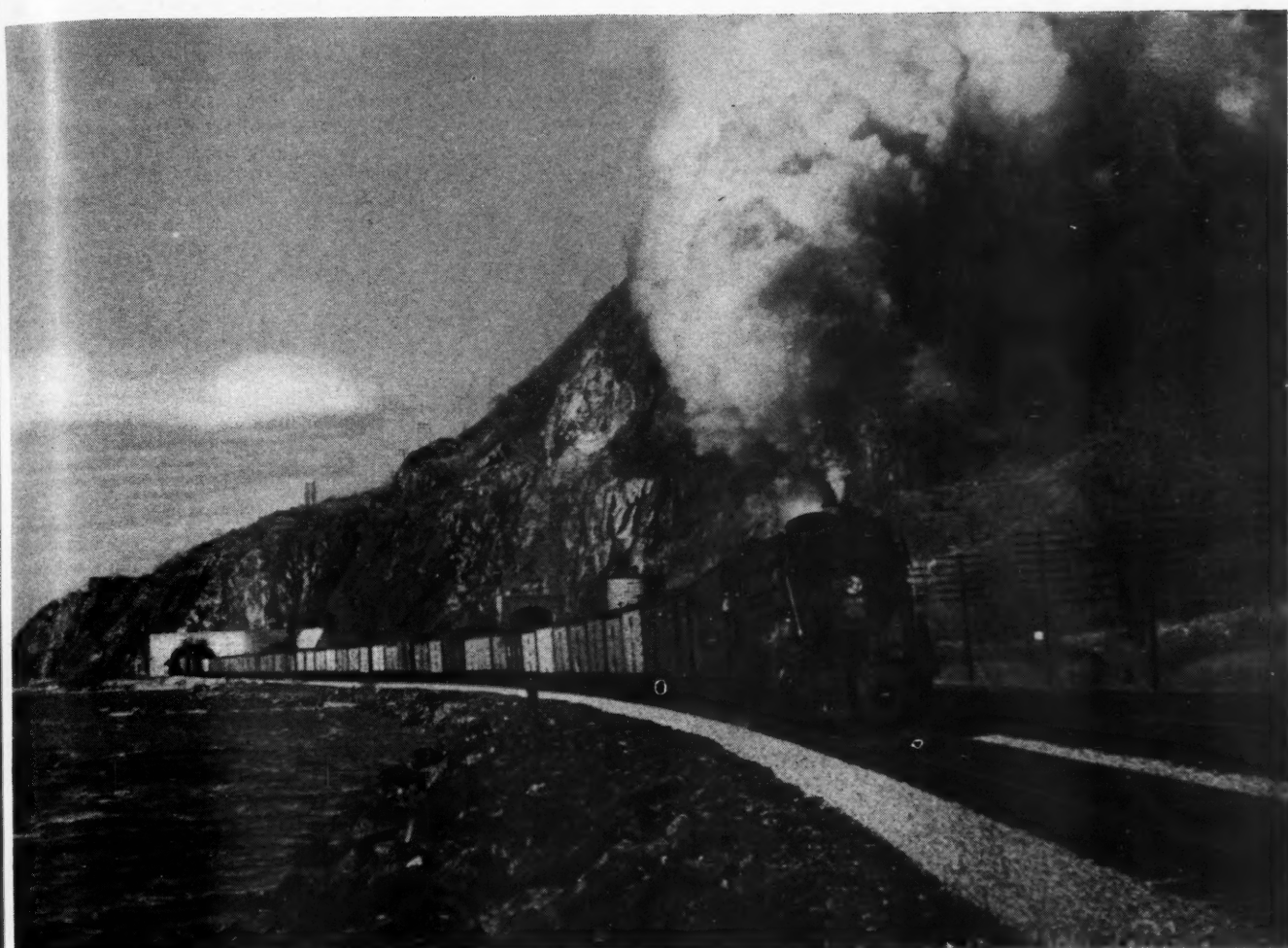
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision. (Switching and Terminal Companies Not Included)

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The railroads are doing a magnificent job of moving traffic with relatively little modern power.

But the outstanding performance of the newer locomotives is convincing evidence that efficient post-war rail-roading must rest on a sound foundation of up-to-date motive power.

LIMA LOCOMOTIVE WORKS

INCORPORATED, LIMA, OHIO

Supply Trade

William Wyer & Co., railroad analysts, have announced the removal of their office from 207 Market street to 15 Washington street, Newark, N. J.

The **American Hoist & Derrick Company** has moved its Chicago office from 208 W. Washington street, to the Conway building, 111 W. Washington street.

By vote of its stockholders at the 42d annual meeting, the **American Brake Shoe & Foundry Company** has changed its name to the **American Brake Shoe Company**.

William H. Harman has resigned as vice-president in charge of sales of the **Baldwin Locomotive Works** to become president of **Wm. Sellers & Co.**, Philadelphia, Pa. In 1894 Mr. Harman joined R. D. Wood & Co., remaining with that company until 1915, when he left the position as sales manager of the hydraulic machinery division to become president of



William H. Harman

the Southwark Foundry & Machine Co. In 1929 he became vice-president and general manager of the Baldwin-Southwark Corporation, coincident with the merging of the two companies, and in December, 1938, Mr. Harman added to his duties that of the vice-president in charge of sales of the Baldwin Locomotive Works. He will continue as a member of the board of directors of the Baldwin Locomotive Works.

N. R. Knox, formerly vice-president in charge of manufacturing, has been elected president of the **Bucyrus-Erie Company**, South Milwaukee, Wis. He succeeds **W. W. Coleman**, who has been re-elected chairman of the board.

L. A. Rowe, special representative, and **A. W. MacLean**, Southern sales manager of the **MacLean-Fogg Lock Nut Company**, Chicago, have been elected vice-presidents; **Ernest G. Doke**, engineer, has been promoted to assistant to president and **Joseph J. Murphy** has been appointed special representative.

Mr. Rowe attended the engineering school of Iowa State College, Ames, Ia., and later entered the employ of the Pacific

Electric at Los Angeles, Calif. From 1916 to 1919 he was employed in the mechanical department of the Atchison, Topeka & Santa Fe, and from 1919 to 1930, he was with the Spring Packing Corporation. In 1934 he was appointed a special



L. A. Rowe

representative of the **MacLean-Fogg Lock Nut Company**, which position he has held until his recent election.

Mr. MacLean entered the railway supply business with the **Boss Nut Company**, Chicago in 1913. He became associated with the **MacLean-Fogg** organization in 1928 and in 1932 was promoted to Southwestern sales manager. In 1941 he was made Southern sales manager, which position he has held until his recent election.

Mr. Doke was graduated from **Purdue University** in 1937 and immediately entered the railway supply business. In 1940 he was appointed engineer of the **MacLean-Fogg** organization, which position he has held until his recent promotion.

Mr. Murphy was graduated from **Dartmouth College** in 1925 and spent several years in the advertising and the securities businesses. He entered the railway supply business in 1940, selling asphalt specialty



A. W. MacLean

products in the railway and marine fields. He entered the employ of the **MacLean-Fogg Lock Nut Company** on April 1, 1943.

Francis Bradley, formerly vice-president, has been elected president of the **Midvale Company**, Philadelphia, Pa., to

succeed **Harry L. Frevert**, who has been elected to the position of chairman of the board. **George E. Smith**, general superintendent of the company, was elected vice-president to succeed Mr. Bradley. **Ralph Kelly**, president of the **Baldwin Locomotive Works**, was elected a director of the **Midvale Company**, and **Charles E. Brinley**, **Edward Hopkinson, Jr.**, and **James E. Gowen** were elected to serve as an executive committee, with Mr. Frevert and Mr. Bradley members ex officio.

OBITUARY

August T. Sebelien, secretary and treasurer of the **Davenport-Besler Corporation**, Davenport, Ia., died on April 6.

Herbert G. Cook, railway supply representative of San Francisco, Calif., died in that city on April 28 of a heart ailment. Mr. Cook represented the **Standard Railway Equipment Company**, the **Dearborn Chemical Company**, the **Nathan Manufacturing Company** and other supply companies and was former general storekeeper of the **Southern Pacific**.

Equipment and Supplies

FREIGHT CARS

THE **NORFOLK AND WESTERN** has placed an order for 1,000 composite-type hopper cars of 50 tons' capacity, allocating 500 to the **Bethlehem Steel Company** and 500 to the **Virginia Bridge & Iron Co.**

SIGNALING

THE **CANADIAN PACIFIC** has ordered materials for the installation of automatic block signaling for the **White River** subdivision from the **Union Switch & Signal Co.** This territory extends from **White River, Ont.**, to **Chapleau, Ont.**, 129 miles of single track, and involves 268 searchlight high and dwarf signals, relays, rectifiers, switch circuit controllers, etc. The signals will be located so that no change will be required if centralized traffic control should be added at a later date. The field installation will be carried out by the railway company's signal construction forces.

THE **CANADIAN PACIFIC** has ordered material for the installation of automatic block signaling for the **Heron Bay** subdivision from the **General Railway Signal Company**. This territory extends from **White River, Ont.**, to **Schreiber, Ont.**, 119 miles of single track. The signals will be located so that no change will be required when centralized traffic control is added at a later date. This installation requires 251 searchlight high and dwarf signals, 609 relays, 305 rectifiers, 70 switch circuit controllers. The field installation will be carried out by the railway company's signal construction forces.



HANDLING HEAVIER TRAINS WITH THE LOCOMOTIVE BOOSTER

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As trains have lengthened with the rush of wartime traffic, the problem of starting the heavier loads has become more difficult. » » » Booster-equipped locomotives have the added power for use in starting and in accelerating that is of exceptional value under today's operating conditions. » » » On thousands of locomotives, the Locomotive Booster* is making it possible to handle extra tonnage and meet exacting schedules.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.
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Financial

CHICAGO, ROCK ISLAND & PACIFIC.—Sale of Certificates.—The District court, on April 26, authorized the trustee of the Rock Island to sell \$10,000,000 worth of United States Treasury certificates of indebtedness maturing August 1, 1943, owned by the railroad and to reinvest the proceeds in Treasury certificates dated April 15, 1943 and maturing on April 1, 1944. The railroad realizes premiums and accrued interest of \$11,425 on the sale.

COLORADO & SOUTHERN.—Interest Payment.—Fixed and contingent interest amounting to \$32.50 on each \$1,000 general mortgage bond of this company was paid on May 1, the total interest paid amounting to \$545,837. At the same time fixed and contingent interest on the senior bonds held by the Reconstruction Finance Corporation, amounting to \$742,931 was paid. The payments were made pursuant to the plan of adjustment approved March 8 by a three-judge Federal court in Denver, Col., under the McLaughlin Act passed by Congress last October. Earnings of the railway for 1942 were sufficient to cover all contingent interest under the plan.

DELAWARE & HUDSON.—Extension of Maturity.—A petition has been filed in the U. S. District Court in New York by the Delaware & Hudson Company and the Delaware & Hudson Railroad Corporation, seeking approval of a plan of debt adjustment with regard to the first and refunding mortgage 4 per cent bonds of the Delaware & Hudson Company, due May 1, 1943, of which \$47,769,000 are in the hands of the public. The petition states that holders of more than two-thirds of the bonds have assented to the plan, which was approved without modification by the Interstate Commerce Commission on March 24, 1943.

The court on April 27 issued an order approving the petition and providing for a hearing on the plan to be held before a special court on June 1 in New York. A further order was issued by the court restraining and enjoining, during the pendency of the proceedings, the institution or prosecution in any court, state or federal, of any action to enforce any right against either of the petitioners or their property based upon any claim affected by the plan.

The plan as proposed provides for a cash payment of 10 per cent of the principal of the bonds in the hands of the general public and an extension of the remaining principal of the bonds for 20 years. In addition, it provides for additional security through (1) an additional sinking fund of two-thirds of net income and one-half the liquidation value of certain investment securities, and (2) the pledge of certain securities of lessor companies.

The management announced that the regular 4 per cent interest on the bonds will be paid when due on May 1 and that the 10 per cent cash payment provided by the plan will bear interest at 4 per cent per annum from May 1 until made available

for payment after the plan shall have been consummated.

ERIE.—Trackage Rights.—This company has applied to the Interstate Commerce Commission for authority to operate under trackage rights over a 2.9-mile line of the Lehigh Valley in the vicinity of Avoca, Pa.

ELGIN, JOLIET & EASTERN.—Annual Report.—The 1942 income account of this road shows a net income, after interest and other charges, of \$2,959,491, as compared with a net income of \$4,877,347 in 1941. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
Average Mileage Operated	391.61	.....
RAILWAY OPERATING REVENUES	\$33,716,298	+\$4,328,642
Maintenance of way and structures	2,296,327	-28,883
Maintenance of equipment	7,327,053	+2,390,229
Transportation	11,239,639	+1,397,449
TOTAL OPERATING EXPENSES	21,784,544	+3,974,520
Operating ratio	64.61	+04.01
NET REVENUE FROM OPERATIONS	11,931,754	+354,122
Railway tax accruals	6,942,574	+2,766,544
Hire of Equipment—Net Dr.	1,231,376	-556,056
Joint facility rents—Net Dr.	76,685	4,489
NET RAILWAY OPERATING INCOME	3,681,119	-1,860,855
Non-operating income	73,385	-84,956
TOTAL INCOME	3,754,504	-1,945,812
Interest on funded debt	604,803	-6,872
TOTAL FIXED CHARGES	766,935	-31,132
Balance of Net Income transferred to Profit and Loss (Surplus)	\$2,959,491	-\$1,917,856

FLORIDA EAST COAST.—Reorganization Expenses.—Division 4 of the Interstate Commerce Commission has determined the amounts of claims for allowances of compensation for services rendered and expenses incurred in this company's reorganization proceedings for the period ending, generally, on October 1, 1942. Of the total amount claimed, \$382,964 plus certain unspecified sums, the total allowed in this order is \$149,692. With the exception of two small claims, the full amounts asked for were not allowed, and in most instances substantial reductions were ordered. Four claims were disallowed entirely.

The largest single claim was that of Davis Polk Wardwell Sunderland & Kiendl, counsel for the committee for first and refunding mortgage bonds, on which \$45,899 was allowed on a claim for \$109,483. Other large requests were those of the committee for first and refunding mortgage bonds, which asked for \$39,058 and was allowed \$14,714; J. P. Morgan & Co., depositary for this committee, allowed \$15,401 on claims for \$45,210; Fleming, Jones, Scott & Botts, counsel for the institutional group for first mortgage bonds, allowed \$21,600 on a claim for \$44,842; and Percival E. Jack-

son and Milam, McIlvaine & Milam, counsel for the independent protective committee for first mortgage bonds, allowed \$9,497 on a claim for \$51,362.

The claims so allowed applied to both the receivership proceedings and the proceedings under Section 77 of the Bankruptcy Act. The report points out that no claim for services or expenses has been filed at present by the Florida National Building Corporation and affiliated interests represented by trustees of the Alfred I. duPont estate, whose combined ownership is in excess of 53 per cent of the outstanding first and refunding bonds, who consider the commission's proposed plan for reorganization unsatisfactory and "will oppose it vigorously before the court."

In analyzing the services of the Bankers Trust Company, trustee of the first and refunding mortgage bonds, the division's report notes that its "consideration is now being given to the proposal to co-ordinate the operation of the debtor's railroad with the Seaboard-All Florida."

FONDA, JOHNSTOWN & GLOVERSVILLE.—Annual Report.—The 1942 annual statement of this road shows a net income, after interest and other charges, of \$42,201, as compared with a net deficit of \$43,470 in 1941. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
RAILWAY OPERATING REVENUES	\$720,054	+\$160,816
TOTAL OPERATING EXPENSES	474,375	+70,452
NET REVENUE FROM OPERATIONS	245,679	+90,364
Taxes	32,456	-482
RAILWAY OPERATING INCOME	213,223	+90,846
Net Rents—Dr.	7,476	-2,625
NET RAILWAY OPERATING INCOME	205,747	+93,471
Other income	22,762	-3,595
TOTAL INCOME	228,509	+89,876
Rent for leased roads	6,633	-60
Interest on funded debt	137,700	+483
TOTAL FIXED CHARGES	158,717	+2,362
NET INCOME	\$42,201	+\$85,671

LEHIGH & HUDSON.—Annual Report.—The 1942 annual statement of this road shows a net income, after interest and other charges, of \$478,338, compared with a net income of \$454,843 in 1941. Selected items from the income statement follow:

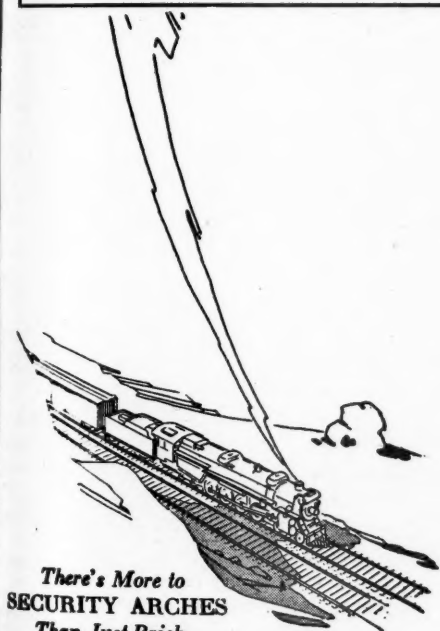
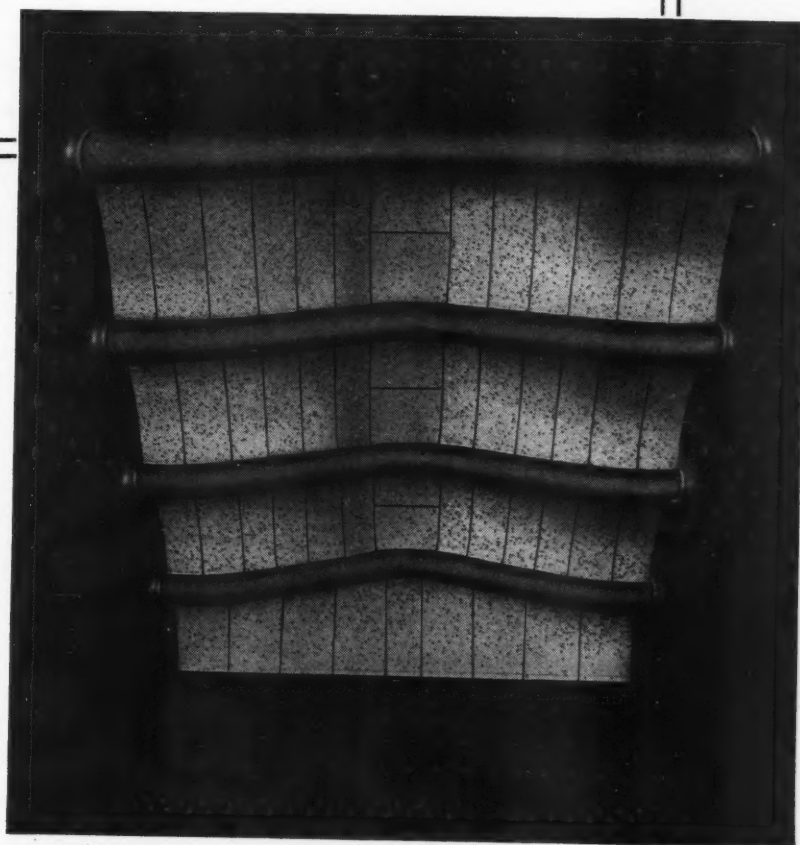
	1942	Increase or Decrease Compared with 1941
RAILWAY OPERATING REVENUES	\$3,386,413	+\$1,128,841
Maintenance of way and structures	396,782	+129,057
Maintenance of equipment	360,996	+33,887
Transportation	940,108	+313,814
TOTAL OPERATING EXPENSES	1,834,122	+490,611
Operating ratio	54.2	-5.3
NET REVENUE FROM OPERATIONS	1,552,291	+638,230
Railway tax accruals	727,536	+393,866

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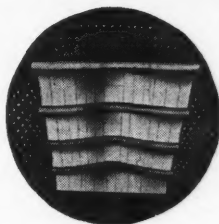
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Refractory Specialists



**AMERICAN ARCH CO.
INCORPORATED**
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*Locomotive Combustion
Specialists*

Hire of equipment	277,219	+197,625
Joint facility rents	93,549	+22,695
NET RAILWAY OPERATING INCOME	453,987	+24,045
Non-operating income	24,941	-631
GROSS INCOME	478,927	+23,414
TOTAL DEDUCTIONS FROM GROSS INCOME	589	-81
NET INCOME	\$478,338	+\$23,495

LA SALLE & BUREAU COUNTY.—*Trackage Rights*.—This road has applied to the Interstate Commerce Commission for authority to operate under trackage rights over a 2.31-mile line of the New York Central in the vicinity of Ladd, Ill., and a 0.16-mile line of the Chicago & North Western at La Salle Junction, Ill.

LEHIGH VALLEY.—*Annual Report*.—The 1942 annual statement of this road shows a net income, after interest and other charges, of \$6,373,607, as compared with a net income of \$3,256,470 in 1941. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
Average Mileage Operated	1,262.42	-6.04
RAILWAY OPERATING REVENUES	\$78,171,307	+\$21,420,585
Maintenance of way and structures	6,932,301	+2,359,443
Maintenance of equipment	12,350,345	+3,352,717
Transportation expenses	27,669,443	+5,548,181
TOTAL OPERATING EXPENSES	50,201,772	+11,538,378
Operating ratio	64.22	-3.91
NET REVENUE FROM OPERATIONS	27,969,535	+9,882,207
Railway tax accruals	10,253,527	+5,163,166
Equipment rents—Net Dr.	4,566,192	+1,830,029
Joint facility rents—Net Dr.	32,240	-135,058
NET RAILWAY OPERATING INCOME	13,117,576	+3,024,070
Total other income	1,034,544	+99,067
TOTAL INCOME	14,152,119	+3,123,137
Rent for leased roads	2,624,417	-26,973
Interest on funded debt	4,201,659	-131,684
TOTAL DEDUCTIONS FROM INCOME	7,778,513	+5,999
NET INCOME	\$6,373,607	+\$3,117,137

MAINE CENTRAL.—*Annual Report*.—The 1942 annual report of this road shows a net income, after interest and other charges, of \$1,744,441, an increase of \$525,359, as compared with the 1941 net income. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
RAILWAY OPERATING REVENUES	\$17,405,965	+\$2,679,507
Maintenance of way and structures	2,219,711	+225,763
Maintenance of equipment	3,110,802	+508,717
Transportation	5,745,722	+728,275
TOTAL OPERATING EXPENSES	11,766,406	+1,484,904
Operating ratio	67.60	-2.22

NET REVENUE FROM OPERATIONS	5,639,559	+1,194,602
Railway tax accruals	2,309,318	+1,064,482
RAILWAY OPERATING INCOME	3,330,241	+130,120
NET RAILWAY OPERATING INCOME	3,039,819	+337,337
Total other income	634,771	+183,224
TOTAL INCOME	3,674,589	+520,561
Rent for leased roads	572,522	-947
Interest on funded debt	1,136,569	-39,614
TOTAL OTHER DEDUCTIONS	1,900,148	-4,798
NET INCOME	1,774,441	+525,359
Disposition of net income:		
Income applied to sinking and other reserve funds	3,587	+998
Dividend Appropriations	81,720	.....
Balance transferred to profit and loss	\$1,689,134	+\$524,361

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*New Directors Elected*.—James L. Hetland, general counsel of the Minneapolis, St. Paul & Sault Ste. Marie, (Soo Line and H. C. Grant, general manager of the Western Lines of the Canadian Pacific at Winnipeg, Man., have been elected to the board of directors.

NORTHERN PACIFIC.—*Promissory Notes*.—Division 4 of the Interstate Commerce Commission has authorized this company to issue two promissory notes in the aggregate amount of \$5,400,906 in evidence of, but not in payment for, the unpaid balance on certain conditional sales contracts for equipment in order that requirements of federal tax laws may be met. The report again called attention to the division's stated policy of refusing such applications where the equipment contracts are entered into after January 1, 1943.

NORTHERN PACIFIC.—*Equipment Trust*.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$3,200,000 of 2 per cent serial equipment trust certificates sold to the First Boston Corporation and associates at 99.689, the proceeds to be applied to the purchase of 250 hopper cars, 300 flat cars, and 10 locomotives, as reported in *Railway Age* of April 3, page 697. The transaction was approved, the division's report indicated, because the company has agreed to set aside not less than \$3,200,000 during the year 1943 for retirement of long term debt carrying higher rates of interest than the new issue.

PITTSBURGH & WEST VIRGINIA.—*Annual Report*.—The 1942 annual statement of this road shows a net income after interest and other charges, of \$1,278,967, an increase of \$104,173, as compared with the 1941 net income. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
RAILWAY OPERATING REVENUES	\$6,460,199	+\$1,177,085
Maintenance of way and structures	948,214	+97,278
Maintenance of equipment	1,238,221	+291,702
Transportation	1,462,715	+343,836

TOTAL OPERATING EXPENSES	4,176,188	+753,575
Operating ratio	64.64	.14
NET REVENUE FROM OPERATIONS	2,284,011	+423,510
Railway tax accruals	565,609	+292,685
RAILWAY OPERATING INCOME	1,718,402	+130,825
Joint facility rents—Net Dr.	6,347	-3,976
NET RAILWAY OPERATING INCOME	1,787,587	+133,186
Non-operating income	363,389	-64,363
GROSS INCOME	2,150,976	+68,823
Interest on funded debt	845,097	-32,214
TOTAL DEDUCTIONS FROM GROSS INCOME	872,009	-35,350
NET INCOME	1,278,967	+104,173
Disposition of net income:		
Income applied to sinking fund	528,398	+53,939
Income transferred to profit and loss	\$750,569	+\$50,234

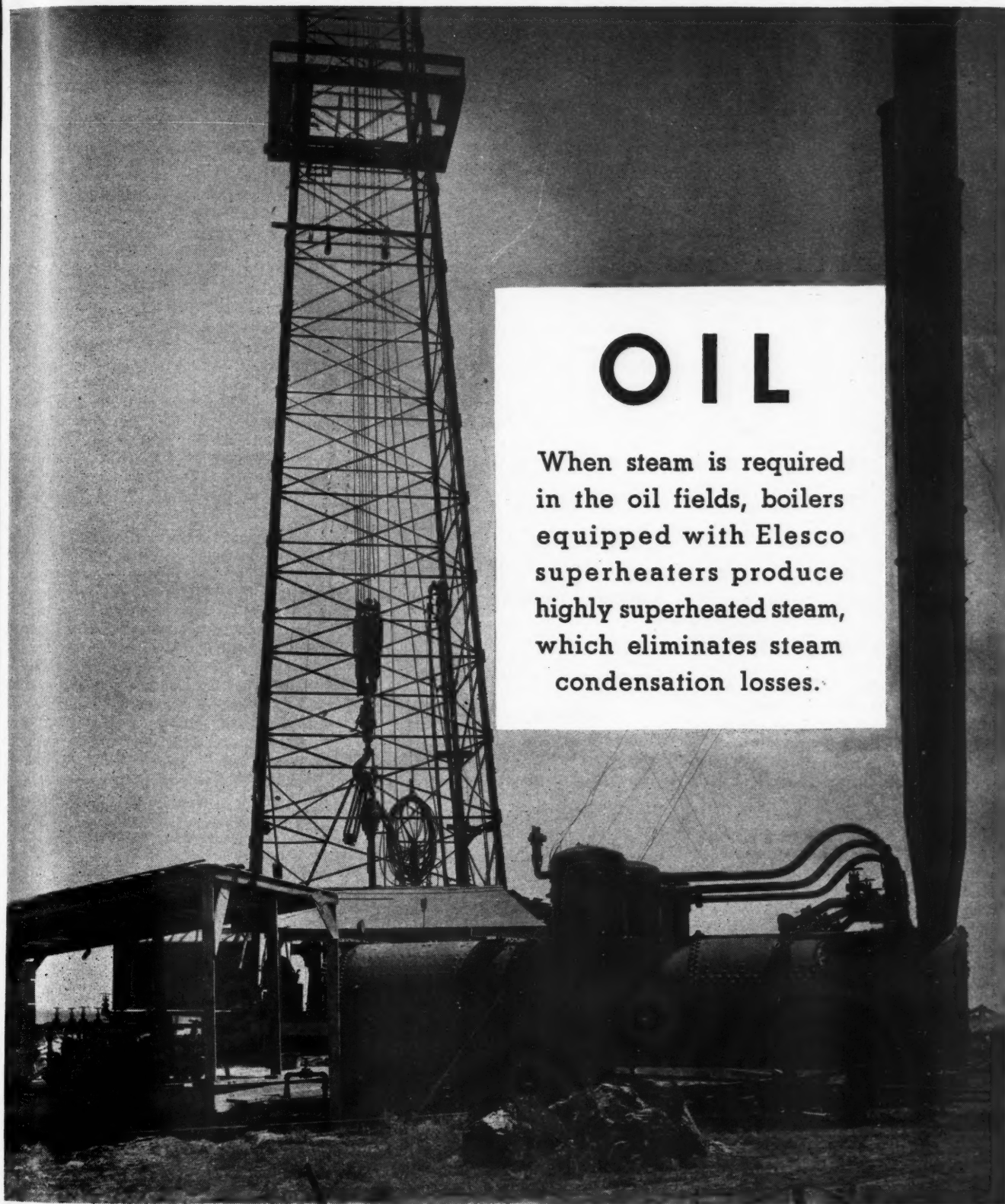
RUTLAND.—*Annual Report*.—The 1942 annual statement of this road shows a net income after interest and other charges, of \$196,161, as compared with a net deficit of \$70,791 in 1941. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
Average Mileage Operated	407.29	.....
RAILWAY OPERATING REVENUES	\$4,287,847	+\$515,759
Maintenance of way and structure	474,577	+56,643
Maintenance of equipment	792,082	+33,825
Transportation	1,946,134	+79,423
TOTAL OPERATING EXPENSES	3,484,317	+180,539
Operating ratio	81.26	-6.32
NET REVENUE FROM OPERATIONS	803,530	+335,220
Railway tax accruals	250,289	+31,348
RAILWAY OPERATING INCOME	553,241	+303,871
Equipment rents—Net Cr.	5,572	+19,654
Joint facility rents—Net Cr.	36,537	+4,517
NET RAILWAY OPERATING INCOME	595,350	+328,042
Total other income	71,856	+2,969
Total income	667,206	+331,011
Rent for leased roads and equipment	15,000	.....
Interest on funded debt	386,095	-458
TOTAL FIXED CHARGES	401,283	-328
NET INCOME	\$196,161	+\$266,953

ST. LOUIS SOUTHWESTERN.—*Trackage Rights*.—This road has applied to the Interstate Commerce Commission for authority to operate passenger trains under trackage rights over a 4.28-mile line from Valley Junction, Ill., to St. Louis, Mo., including the MacArthur Bridge across the Mississippi River and approach tracks of the Terminal Railroad Association.

ST. LOUIS SOUTHWESTERN.—*Annual Report*.—The 1942 annual statement of this road shows a net income, after interest and other charges, of \$5,673,577, as compared with a net income of \$4,472,048 in 1941.

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THE SUPERHEATER COMPANY, LTD.

Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
Average Mileage Operated	1,616.65	-5.24
RAILWAY OPERATING REVENUES	\$48,714,198	+\$20,458,151
Maintenance of way and structures	4,107,600	+34,515
Maintenance of equipment	4,734,965	+980,272
Transportation expenses	12,066,426	+4,425,460
TOTAL OPERATING EXPENSES	23,314,307	+5,788,110
Operating ratio	47.86	-14.17
NET REVENUE FROM OPERATIONS	25,399,890	+14,670,041
Railway tax accruals	13,289,957	+11,717,381
RAILWAY OPERATING INCOME	12,109,933	+2,952,660
Net Rents—Dr.	3,494,568	+1,832,366
NET RAILWAY OPERATING INCOME	8,615,365	+1,120,294
Total other income	105,279	-7,555
TOTAL INCOME	8,720,644	+1,112,739
Rent for leased roads and equipment	13,496	-56
TOTAL FIXED CHARGES	3,019,059	-4,834
Net income transferred to profit and loss	\$5,673,577	+\$1,201,529

SOUTHERN.—Note of Georgia Southern & Florida.—The Georgia Southern & Florida has applied to the Interstate Commerce Commission for leave to withdraw its application for authority to issue and deliver to the Southern an unsecured promissory note for \$1,000,000.

TENNESSEE CENTRAL.—Bond Issue.—Division 4 of the Interstate Commerce Commission has authorized this company to issue \$260,000 of 4 per cent first mortgage bonds, series A, to be pledged as collateral security for notes to be issued to finance improvements to its line from Nashville, Tenn., to Hopkinsville, Ky., including the purchase of rail, filling trestles, strengthening bridges, and application of ballast and tie plates.

VIRGINIAN.—Annual Report.—The 1942 annual statement of this road shows a net income, after interest and other charges, of \$5,090,913, as compared with a net income of \$6,559,710 in 1941. Selected items from the income statement follow:

	1942	Increase or Decrease Compared with 1941
Average Mileage Operated	657.18	+3.88
RAILWAY OPERATING REVENUES	\$26,523,147	-\$1,314,182
Maintenance of way and structures	2,190,168	+106,550
Maintenance of equipment	5,591,159	+318,935
Transportation	4,665,618	+375,383
TOTAL OPERATING EXPENSES	13,296,410	+861,110
Operating ratio	50.13	+5.46
NET REVENUE FROM OPERATIONS	13,226,737	-2,175,292
Railway tax accruals	6,657,500	-555,960

RAILWAY OPERATING INCOME	5,569,237	-1,619,332
Equipment rents—Net Cr.	754,345	+206,739
Joint facility rents—Net Cd.	46,175	-6,545
NET RAILWAY OPERATING INCOME	7,369,757	-1,419,139
Other income	48,594	-54,441
TOTAL INCOME	7,418,351	-1,473,580
Interest on funded debt	2,261,765	-3,479
TOTAL FIXED CHARGES	2,322,506	-4,828
Net income transferred to profit and loss	\$5,090,913	-\$1,468,797

WABASH.—Acquisition.—Division 4 of the Interstate Commerce Commission has authorized this company to acquire the property of the Wabash-St. Charles Bridge Company, a 2.27-mile line crossing the Missouri River at St. Charles, Mo., and to terminate the bridge company's corporate existence.

WILMINGTON, BRUNSWICK & SOUTHERN.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its entire line from Navassa, N. C., to Southport, 30.2 miles.

Average Prices Stocks and Bonds

	Apr. 27	Last week	Last year
Average price of 20 representative railway stocks...	36.64	36.47	24.22
Average price of 20 representative railway bonds...	77.16	76.23	66.79

Dividends Declared

Cleveland, Cincinnati, Chicago & St. Louis.—5 Per Cent Preferred, \$1.25, quarterly, payable April 30 to holders of record April 20.
 Morris & Essex Extension.—Guaranteed, \$2.00, semi-annually, payable May 1 to holders of record April 16.
 Norfolk & Western.—\$2.50, quarterly, payable June 10 to holders of record May 22.
 Passaic & Delaware Extension.—Guaranteed, \$2.00, semi-annually, payable May 1 to holders of record April 16.
 Pullman, Inc.—50¢, payable June 15 to holders of record May 28.
 Reading.—First Preferred, 50¢, quarterly, payable June 10 to holders of record May 20.
 Utica, Chenango & Susquehanna Valley.—Irregular, \$3.00, payable May 1 to holders of record April 16. (Payment delayed pending settlement of court action.)

Abandonments

ILLINOIS CENTRAL.—Division 4 of the Interstate Commerce Commission has denied the application of this company's subsidiary, the Yazoo & Mississippi Valley, for authority to abandon its line from Ethel, La., to Clinton, 8.34 miles, without prejudice to renewal after one year if the tributary territory has not demonstrated its ability to provide sufficient traffic to permit operation without undue burden on the road.

NEW YORK CENTRAL.—This company and the West Shore have applied to the Interstate Commerce Commission for authority to abandon operation of and to abandon, respectively, a line from Cazenovia, N. Y., to Oran, 5.7 miles.

SOUTHERN.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon its line from Statesville, N. C., to Taylorsville, 18.5 miles.

Construction

The Long Island's Proposed Post-War Program

The Long Island has announced a proposed post-war improvement program recommended by the J. G. White Engineering Corporation after its year-long study of the railroad and its operations. The cost of the program is estimated at \$30,000,000 and, if carried out, would provide for further improvement and modernization of the road's property and equipment, plus the electrification of 141 miles of road. The White engineers point out, however, that this program could not be undertaken except on the basis of definite assurance of sufficient earnings, through adequate fares and relief from burdensome property taxes, to amortize the cost of the improvements and to yield a reasonable net return.

Some of the proposed improvements include the easing of curvatures, the installation of heavier rails throughout the system and better ballast, the addition of more double-deck cars for greater seating capacity, the modification of present motors and controls for smoother starting and faster acceleration, better ventilation of cars, the installation of more parcel racks in cars for greater comfort of passengers, and the purchase of new modern electric cars and trailers as needed for extended electrification.

Eventual electrification plans cover a period of approximately 20 years and include the following:

1945-1950	East Williston to Oyster Bay—13.1 mi.
1945-1950	Mineola to Babylon—18.3 mi.
1945-1950	Hicksville to Northport—14.8 mi.
1945-1950	Babylon to Patchogue—17.2 mi.
1950-1955	Northport to Pt. Jefferson—18 mi.
1950-1955	Bethpage Jct. to Ronkonkoma—20 mi.
1955-1960	Electrification extended to Manorville and Speonk
1960-1965	Manorville to Greenport and Speonk to Montauk

The road states that "completion of the proposed improvement program would greatly increase property values in many areas, bringing additional revenue to the counties, thereby justifying reduction or elimination of railroad property taxes."

LEHIGH VALLEY.—The New Jersey Board of Public Utilities Commissioners has granted this road permission to extend the time for beginning and completion of work on the alteration of certain grade crossings in Cranford, N. J., from April 1, 1943, and March 31, 1944, respectively, to April 1, 1944, and March 31, 1945, respectively. The railroad maintained that restrictions on this type of construction have not been lifted and war priorities on necessary materials for such construction could not be obtained at this time.

SEABOARD AIR LINE.—This road has let contracts for grading and the construction of a concrete bridge at Long Branch near Rawlings, Va., and for repairs to bridge at Broad River near Coosaw, S. C., at approximate expenditures of \$56,000 and \$27,000, respectively.

Railway Officers

EXECUTIVE

John B. Parrish, assistant vice-president of the Chesapeake & Ohio, has been appointed vice-president, with headquarters as before at Richmond, Va.

Frederick L. Rowland, secretary to trustees of the New York, New Haven & Hartford, has been appointed assistant to trustees, with headquarters at New Haven, Conn.

Leonard B. Allen, assistant to the president of the Chesapeake & Ohio, New York, Chicago & St. Louis and the Pere Marquette, has been promoted to assistant vice-president-assistant to the president of the Chesapeake & Ohio at Cleveland, Ohio.

FINANCIAL, LEGAL AND ACCOUNTING

Harry T. Moyer, whose promotion to general claim agent of the Detroit, Toledo & Ironton, with headquarters at Detroit, Mich., was reported in the *Railway Age* of April 17, was born at Conshohocken, Pa., on March 6, 1897, and entered the service of the Central Inspection and Weighing Bureau at Detroit on February 25, 1924, as a weight agreement auditor. On June 26, 1926, he was promoted to district traveling inspector, with the same headquarters, and on July 15, 1929, he became assistant general claim agent of the D. T. & I., with headquarters at Dearborn,



Harry T. Moyer

Mich., holding that position until his new appointment, effective April 1.

William W. Doyle, whose promotion to assistant general auditor of the Detroit, Toledo & Ironton, with headquarters at Dearborn, Mich., was reported in the *Railway Age* of April 17, was born at Huron, Kan., on October 10, 1898, and entered railway service on October 29, 1916, as a clerk of the Chicago, Rock Island & Pacific at Kansas City, Mo. He subsequently

held several other clerical positions on that road and on April 19, 1921, became a special clerk of the general auditor's office of the D. T. & I., with headquarters at Dearborn. On July 1, 1924, Mr. Doyle was advanced to assistant chief clerk of the road and equipment accounting department and four years later he was promoted to chief clerk. On August 1, 1932, he was appointed chief clerk of the general auditor's office at Dearborn, holding that position until his new promotion, effective April 1.

J. Fred Andrews, assistant comptroller of the Chesapeake & Ohio, the New York, Chicago & St. Louis (Nickel Plate), and the Pere Marquette, has been promoted to comptroller of the three lines, with headquarters as before at Cleveland, Ohio. He succeeds **E. M. Thomas**, whose election to vice-president was reported in the *Railway*



J. Fred Andrews

Age of February 20. **Harry L. Lehmkuhle**, general auditor of the Nickel Plate, has been advanced to assistant comptroller of the three roads, with headquarters at Cleveland.

Mr. Andrews was born at Staunton, Va., on September 29, 1891, and entered railway service as a telegraph operator and agent of the C. & O., in April, 1905. In 1912 he was promoted to traveling auditor of the accounting department, and in July, 1926, he was advanced to manager of the centralized station accounting bureau. In 1938 Mr. Andrews was promoted to auditor of station accounts and overcharge claims, with headquarters at Cleveland, advancing on January 1, 1941, to the position he held until his new appointment, effective April 23.

William E. Rittenhouse, whose retirement as auditor of freight traffic of the Baltimore & Ohio at Baltimore, Md., was announced in the *Railway Age* of April 24, was born at Cincinnati, Ohio, and entered railroad service on March 19, 1896, as a clerk to the roadmaster and building foreman of the Baltimore & Ohio at Mt. Vernon, Ind. In 1901 he became a clerk in the office of the chief engineer at Cincinnati, and in 1905 he was appointed accountant in the office of the engineer of maintenance of way at Baltimore. He became traveling auditor of the Cincinnati,

Hamilton & Dayton, (now part of the Baltimore & Ohio) in 1907, and left the service of that road in 1910 to become an examiner with the Interstate Commerce Commission at Washington, D. C. In 1911 he returned to the Cincinnati, Hamilton & Dayton as auditor of disbursements. In 1912 he was appointed auditor of traffic accounts, and in 1917 he was appointed assistant auditor of merchandise receipts of the Baltimore & Ohio, holding this position until 1919, when he was promoted to auditor. In July, 1934, Mr. Rittenhouse was appointed auditor of freight traffic, the position he held at the time of his retirement from active service.

Arthur E. Clark, secretary of the New York, New Haven & Hartford and affiliated companies at New Haven, Conn., has retired after fifty-three years of service with that company. Mr. Clark, who is also a director of the New Haven and several of its subsidiaries, will continue to serve in that capacity.

OPERATING

C. F. Fitzsimmons has been appointed assistant to the general manager of the Virginian, with headquarters at Norfolk, Va.

F. R. Travillion, assistant trainmaster of the Louisville & Nashville at Loyall, Ky., has been promoted to trainmaster, with headquarters at Corbin, Ky., succeeding **W. P. Winstead**, who has been transferred to Latonia, Ky.

G. T. Dunn has been appointed assistant superintendent of the Capreol division of the Canadian National, with headquarters at Capreol, Ont. The position of trainmaster, Capreol division, has been abolished. **J. D. McBain**, conductor on the Quebec and Montreal districts, has been appointed trainmaster, with jurisdiction over the Coteau yard and Alexandria subdivision, Coteau, Que., to East Alburgh, Vt.

C. E. Jones, assistant trainmaster of the Coast division of the Southern Pacific, has been promoted to trainmaster at Tracy, Cal., succeeding **Paul D. Robinson**, transferred to Oakland Pier, Cal. **W. L. Money**, trainmaster at Oakland Pier, has been transferred to Stockton, Cal. **H. G. Harvey**, trainmaster at Beaumont, Tex., has been appointed terminal trainmaster, with headquarters at Indio, Cal., and **C. G. Holmberg** has been appointed trainmaster at Beaumont, succeeding Mr. Harvey.

John McKenzie Greenwood, whose appointment as superintendent of the Rochester division of the New York Central, with headquarters at Rochester, N. Y., was announced in the *Railway Age* of April 17, was born on August 2, 1887, at Chippawa, Ont. Mr. Greenwood entered railroad service as a stepographer in the office of the superintendent of terminal of the New York Central at Buffalo, N. Y., in July, 1906, and subsequently served successively as clerk and stenographer, and accountant in the general superintendent's office. In 1917 he became secretary to the Buffalo

★ ★ **APRIL 10th** ★ ★



★ ★ WAS M-7 DAY ★ ★ ★

Schenectady celebrated the completion, one year ago, of the "tank killer" that helped turn the tide at El Alamein.

It was built without a blueprint. It was asked for in three months—and completed in less than three weeks. It was a military secret exposed to constant public view—yet when it appeared at El Alamein it was a complete surprise to the enemy.

Rommel had never seen anything like it before—and probably never wants to see anything like it again. For this strange hybrid monster—a combination of 105 mm. howitzer and M-3 tank—expertly handled by the men of the British Eighth Army, left 500 Nazi tanks in wreckage and flames and helped start the so-called "Desert Fox" on his way back to Berlin.

One year ago it rolled off the assembly lines in Schenectady. It was then called, technically, the

M-7. In its baptism of fire, it was given the much more descriptive name of "tank killer".

The men and women who were in on its birth had a rough idea of its importance. But they never realized that this deadly product of their skill and effort would play so vital a part in one of the most decisive battles of history—a battle, the successful outcome of which enables us of the United Nations to speak with hope today of the post-war world. Before El Alamein, no one dared think in those terms.

On April 10th we celebrated the appearance of the first M-7, in humble gratitude that we in Schenectady could contribute to a decisive victory thousands of miles away and so heighten the hopes of freedom-loving people everywhere.

To the following goes full credit for the amazing job the M-7 has done . . .

1 To its designers and engineers for their Yankee courage and ingenuity in building the M-7 in record time.

2 To the 10,000 men and women at the Schenectady plant who pitched in to turn the M-7 out in sufficient numbers to turn Rommel.

3 To the populace of Schenectady—who saw the M-7s rumbling through the streets—

and kept their lips discreetly buttoned.

4 To the American railroads for the splendid job they did of getting every M-7 to its point of embarkation.

5 To the United States Navy for transporting these tank killers across thousands of miles of water and delivering them safely.

6 To the heroic men of the British Eighth Army whose expert use of the M-7 finally blasted Rommel's hopes of getting through to Suez.

7 And to the hundreds of sub-contractors and suppliers, and others, for their unflagging cooperation in the building of this mighty weapon of war.



AMERICAN LOCOMOTIVE

MANUFACTURERS OF MOBILE POWER

STEAM, DIESEL AND ELECTRIC LOCOMOTIVES, MARINE DIESELS, TANKS, GUN CARRIAGES & OTHER ORDNANCE

Sub-Committee, Association of American Railroads, and in 1918 was appointed chief clerk, in the office of the terminal manager of the Eastern region of the Railroad Administration at Buffalo. He became chief clerk in the office of the general superintendent of the New York Central at Buffalo in 1919, and in 1925 was appointed chief clerk to the assistant general manager, also at Buffalo. Mr. Greenwood was advanced to trainmaster at Albany in 1925, and in 1936 was appointed assistant to the assistant general manager at Syracuse, N. Y., the position he was holding at the time of his recent appointment as superintendent of the Rochester division.

A. Roy Young, whose retirement as superintendent of the Lehigh and Susquehanna division of the Central of New Jersey at Mauch Chunk, Pa., was noted in the *Railway Age* of April 10, was born on July 6, 1877, at Hampton, N. J. Mr. Young entered railroad service on August 25, 1892, as a clerk and caller of the Central of New Jersey. On November 9, 1895, he became a telegrapher, and on January 25, 1899, was appointed dispatcher's operator. He served as train dispatcher from May 28, 1900, to August 27, 1903, when he became chief clerk to the passenger trainmaster, and on June 7, 1914, he was advanced to assistant passenger trainmaster. On March 11, 1917, he was appointed terminal trainmaster, and served in that capacity until he became passenger trainmaster on July 1, 1924. He served as acting assistant superintendent from March 10, 1926, until he was appointed assistant superintendent on October 1 of the same year. Mr. Young was promoted to superintendent of the Lehigh and Susquehanna division on November 18, 1930. He was transferred to Central and Southern subdivision on January 1, 1936, and on August 12, 1937, returned to the Lehigh & Susquehanna division, which position he held at the time of his retirement from active service.

TRAFFIC

R. C. Michkils, general agent of the Great Northern, with headquarters at Seattle, Wash., has retired after 41 years service with that road.

H. L. Bowyer, chief clerk of the agricultural department of the Central of Georgia, has been promoted to agricultural agent, with headquarters as before at Savannah, Ga.

J. H. Cunningham has been appointed acting general agent of the Union Pacific, with headquarters at Spokane, Wash., replacing **H. M. Adkins**, who has been granted a leave of absence due to illness.

R. M. Barnett has been appointed assistant general freight agent of the Seaboard Air Line, with headquarters at Washington, D. C. The position of general agent, formerly held by Mr. Barnett, has been abolished.

Gerald V. Schuh, passenger representative of the New York Central at Tulsa, Okla., has been promoted to general agent,

with headquarters at Oklahoma City, Okla., succeeding **Kenneth B. Taylor**, transferred to Kansas City, Mo.

W. R. Jones, office manager of the Illinois Central at New Orleans, La., has been advanced to assistant general freight agent, with the same headquarters, succeeding **A. J. Moore**, whose promotion to general freight agent was reported in the *Railway Age* of January 9.

ENGINEERING & SIGNALING

Donald E. Rudisill, whose appointment as engineer maintenance of way of the Western Pennsylvania division of the Pennsylvania at Pittsburgh, Pa., was reported in the *Railway Age* of April 17, is a native of Mt. Carmel, Pa. Entering the service of the Pennsylvania in March, 1923, as a rodman in the office of the division engineer, New York division, at Jersey City, N. J., Mr. Rudisill subsequently served in that capacity and as assistant supervisor of track, successively, on the New York, Philadelphia, Middle and Baltimore divisions, until he was appointed supervisor of track on the Monongahela division in August,



Donald E. Rudisill

1929. In December, 1930, he was assigned to special duty in the office of the chief engineer of the system at Philadelphia, Pa., and in April, 1932, he became supervisor of track on the Buffalo division, later being transferred to the Panhandle division. In November, 1938, he was appointed division engineer on the Monongahela division, and subsequently was transferred to the St. Louis division and then to the New York division. In April, 1942, Mr. Rudisill was assigned to special duty in the office of the chief engineer at Philadelphia, the position he held at the time of his recent appointment as engineer maintenance of way.

MECHANICAL

H. G. Vance, assistant master mechanic of the Southern Pacific, has been promoted to master mechanic, with headquarters as before at Brooklyn, Ore., succeeding **F. A. Schilling**, who has joined the armed services.

H. F. Deery has been appointed road foreman of engines of the Baltimore & Ohio, with headquarters at Riverside,

Baltimore, Md., and **T. H. Hollen** has been appointed general car foreman, with jurisdiction over the Monongah and Wheeling divisions, with headquarters at Benwood, W. Va.

PURCHASES AND STORES

A. E. Johnson, fuel agent of Chicago, Milwaukee, St. Paul & Pacific, has been promoted to assistant to the chief purchasing agent, with headquarters as before at Chicago, succeeding **W. A. Linn**, who has retired.

SPECIAL

W. H. Hobbs, engineering assistant to the chief executive officer of the Missouri Pacific, has been appointed director of research, with headquarters as before at St. Louis, Mo., a newly-created position.

Dr. Kenneth E. Dowd has been appointed chief medical officer of the Canadian National System, with headquarters at Montreal, Que., succeeding **Dr. John McCombe**, who has retired from that office, but who will act in the capacity of consultant to the System medical department.

Harry A. Campbell, assistant chief inspector of the Bureau of Explosives, Association of American Railroads, has been appointed chief inspector, succeeding **W. S. Topping**, who has retired, effective May 1, after 52 years' continuous railroad service, 36 years of which were spent in the service of the Bureau.

OBITUARY

Alfred Kittler, division passenger agent of the Lehigh Valley at Ithaca, N. Y., died at his home there on April 23 at the age of 59.

G. D. Penniman, relief department counsel of the Baltimore & Ohio at Baltimore Md., died at his home in that city on April 25 at the age of 80.

George C. Christy, who retired in 1941 as general superintendent of equipment of the Illinois Central, died in a Chicago hospital on March 18 following a lengthy illness.

Eric E. Wright, assistant vice-president of the New York Central system, with headquarters at Chicago, died suddenly at his home in that city on April 25, following a heart attack. A sketch and photograph of Mr. Wright were published on page 751, of the *Railway Age* of April 10, following his recent promotion to the position he held at the time of his passing.

2,400 TANKS FROM SALVAGED METAL.—More than enough metal to build 2,400 M-4 tanks or 70,000 jeeps has been salvaged from the eight plants of the Pullman-Standard Car Manufacturing Company during 1942. A continuous salvage campaign, carried on in all company plants throughout the year, turned back into productive channels more than 72,000 tons of iron and steel, more than 870 tons of scarcer metals and more than 420 tons of rubber and miscellaneous materials.